

Conifers

Grade	Age	Size	No. Per Bundle	Unit Price		
				Bdl+	100+	500+

Abies balsamea phanerolepis (Canaan Fir) To 75', Zone 4. Attractive dark green needles, silvery beneath. Valued as an ornamental tree and preferred Christmas tree selected for late bud break, moderate growth and heavy lateral branching. Best growth on moist, cold sites, sun to partial shade. Natural range mountains of West Virginia, Tennessee and North Carolina.

Plug	P-0	small plug	10	1.20	.87	.60
Transplant	P-1	6-9"	10	1.41	1.18	.94
		9-12"	10	1.61	1.34	1.07
		12-15"	10	1.91	1.59	1.27
Transplant	P-2	9-12"	10	2.32	1.68	1.16
		12-15"	10	2.72	1.97	1.36
		15-18"	5	3.04	2.20	1.52
		18-24"	5	3.56	2.58	1.78



Abies balsamea phanerolepis.

Abies bornmuelleriana (Black Sea Fir, Turkish Fir) To 150', Zone 6. Beautiful ornamental and Christmas tree for warmer, drier areas where most true firs won't grow. Naturally dense, conical growth retaining lower limbs to ground. Intolerant of limestone soils.

Plug	P-0	small plug	25	1.44	1.04	.72
------	-----	------------	----	------	------	-----

Abies concolor (White Fir)

Seed Origin: San Juan N.F., Colorado, Zone 246 - 248, 7.5 to 9.0

To 190' tall, cold hardy to -30°F, USDA Zone 4. Native to the high elevation mountains of western North America from the Pacific coast to central Colorado south to northern Mexico. Withstands moderate to heavy snow loads. Shade tolerant but prefers full sun. Soil adaptable, prefers moist soil but will survive some drought. Best growth on deep, well-drained sandy loams to dry loams.

Important in the lumber industry, construction grade wood is resistant to split, twist and pitch. Straight grained, fine textured, stiff and strong, used for framing and plywood. Popular Christmas tree, soft needles, good needle retention, natural pyramidal form, pleasant aroma. Stiff branches hold ornaments well. Widely planted ornamental in parks, cemeteries and large gardens. Landscape specimen, blue-gray foliage similar to Blue Spruce. Branches to the ground on younger trees.

The winged seeds are eaten by birds and small mammals. Deer feed on the foliage, porcupine gnaw the bark.

The definition of concolor; "of uniform color" or "of the same color" makes reference to the consistent color of both the bottom and top needle surfaces.



Grade	Age	Size	No. Per Bundle	Unit Price		
				Bdl+	100+	500+

Abies firma (Japanese Fir) To 150', Zone 6. Best in cool, moist summer locations. Sharp, light green needles. Broadly conical form needs plenty of room. Also known as Momi Fir. Slow growth, tolerant of southern heat. Phytophthora Root Rot resistant.

Transplant	P-2	6-9"	10	2.10	1.52	1.05
		9-12"	10	2.40	1.74	1.20

Abies fraseri (Fraser Fir) To 40', Zone 5. Among the most elegant of native conifers. Dense branching, narrowly conical form. Glossy, dark green needles. Most popular commercial Christmas tree grown in southeastern U.S. Widespread regional use for ornamental landscaping. Seeds and buds used extensively by red squirrels.

Seed Origin: Roan Mtn., NC

Plug	P-0	small plug	25	1.20	.87	.60
Transplant	P-2	9-12"	10	1.96	1.42	.98
		12-15"	10	2.20	1.60	1.10
		15-18"	5	2.60	1.89	1.30



Abies fraseri.



Seedling	2-0	6-9"	50	.90	.65	.45
		9-12"	25	1.20	.87	.60
		12-15"	10	1.40	1.02	.70
Transplant	2-2	9-12"	10	2.30	1.67	1.15
		12-15"	10	2.90	2.10	1.45
		15-18"	5	3.50	2.54	1.75
		18-24"	5	4.20	3.05	2.10

Grade	Age	Size	No. Per Bundle	Unit Price		
				Bdl+	100+	500+

Abies grandis (Grand Fir) To 200', Zone 4. Glossy, dark green to bright green fragrant needles. Native in Pacific Northwest from British Columbia south to Northern California and east to Montana/Idaho. Grown commercially for Christmas tree plantations from preferred seed origin. Desirable landscape tree for cool, moist sites. Wildlife value, timber and pulpwood production.

Seed Origin: Sears Creek, Clearwater N.F., Idaho

Seedling	2-0	3-6"	50	.78	.57	.39
		6-9"	50	.92	.67	.46
		9-12"	25	1.50	1.09	.75
Transplant	2-2	9-12"	10	2.20	1.60	1.10
		12-15"	10	2.50	1.81	1.25
		15-18"	5	2.90	2.10	1.45

Abies koreana (Korean Fir)

To 45' tall x 12' wide, cold hardy to -10°F, USDA Zone 6. Graceful, compact pyramidal shape, slow growth rate. Highly ornamental, abundant violet-purple 1" wide cones appear even on young plants, turn tan when mature, stand upright on branches. Provide contrasting interest with shiny dark green 1" needles, 2 silver bands beneath, arranged radially around branches. Needles notched at tip or rounded. Smooth gray-brown bark becoming furrowed with age, straight trunk.



Native to a small area in sub-alpine mountains in North and South Korea. Classified "endangered" in its native habitat.

Prefers moist, neutral to slightly acidic, well-drained rich soils. Prefers cool locations. Not recommended for recurrent hot humid summer conditions. Withstands heavy snow loads. Plant in full sun to partial shade. Not urban air pollution tolerant. Relatively pest and disease free.

Ornamental yard tree, smaller gardens, foundation plant, screen, massing, vertical accent tree.

Plug	P-0	small plug	25	1.44	1.04	.72
Transplant	P-2	9-12"	10	3.30	2.39	1.65
		12-15"	10	4.50	3.26	2.25
		15-18"	5	5.10	3.70	2.55

ABOUT SEED ORIGINS

Conifer seed origins are very important in establishing the genetic characteristics of the resulting plants. Our origins are selected to provide the commercially desirable characteristics for the intended purpose(s). Seed zone numbers, when mentioned, reference the official seed zone maps for the designated state. Following the collection location or seed zone is the approximate minimum elevation when multiplied by 1000, where the seed was collected.

Conifers

Grade	Age	Size	No. Per Bundle	Unit Price		
				Bdl+	100+	500+

Picea engelmannii

(Engelman Spruce) To 150', Zone 2. One of the better spruces for ornamental planting. Light bluish green needles, dense pyramidal form. Native throughout the Rocky Mountains.

Seed Origins: San Juan N.F., CO Zone 246				8.0		
Routt N.F., Zone 513				10.5		
Plug	P-0	small plug	25	1.20	.87	.60
Transplant	P-2	6-9"	10	1.90	1.38	.95
		9-12"	10	2.10	1.52	1.05
		12-15"	10	2.40	1.74	1.20
		15-18"	5	2.80	2.03	1.40

Picea glauca

(White Spruce) To 75', Zone 3. Silver-green foliage on pendulous branches. Tolerant of wind, wet soils. Native to the northern U.S. and Canada.

Seed Origin: Michigan						
Seedling	2-0	6-9"	50	.82	.59	.41
		9-12"	25	.96	.70	.48
		12-15"	10	1.12	.81	.56
Transplant	2-2	9-12"	10	2.18	1.58	1.09
		12-15"	10	3.00	2.18	1.50
		15-18"	5	3.92	2.84	1.96
		18-24"	5	4.38	3.18	2.19

Picea glauca densata

(Black Hills Spruce) To 80', Zone 2. Slow growing, compact tree. Bluish green foliage. Extremely hardy. As an ornamental it gives an alpine meadow effect.

Seed Origin: Black Hills N.F., SD 4.8 - 5.2						
Plug	P-0	small plug	25	1.54	1.12	.77

Picea omorika (Serbian Spruce)

Seed Origin: Germany and Slovenia

To 90' tall x 25' wide, cold hardy to -30°F USDA Zone 4. Native to limestone soils in the Balkans Mountain range of eastern Bosnia and western Serbia in southeastern Europe. Considered vulnerable by the IUCN (International Union for the Conservation of Nature), in its native range it's now protected, just a few stands remain with a population of less than 1,000 trees.

Graceful, slender, narrow-pyramidal, spire-like habit with dense branching to the ground. Cones 2-3" long at branch tips of new growth, emerge dark purple maturing to cinnamon-brown. Thin, pendulous branches turning up at the tips exposing the silvery undersides of the needles. Unlike other Spruces that have a 4 sided needle, Picea omorika has flattened needles, dark green above, 2 white bands underneath. Slender, reddish brown straight trunk up to 3' diameter.

Moderate to slow growth. Full sun, will tolerate some afternoon partial shade. Very adaptable, thrives on a wide range of soils from alkaline, clay, acidic to sandy. Prefers, moist well-drained loams. Will not tolerate standing water. Drought tolerant once established. Urban air pollution tolerant, salt intolerant. Transplants well.

Used for Christmas trees, windbreaks and screens, street tree, tight garden spaces, specimen or in groupings, buffer strips, parking lots. Provides cover for small mammals, nesting for birds. Relatively insect and disease free.

Plug	P-0	small plug	25	1.54	1.12	.77
Transplant	P-2	9-12"	10	2.64	1.91	1.32
		12-15"	10	2.98	2.16	1.49
		15-18"	5	3.42	2.48	1.71
		18-24"	5	4.08	2.96	2.04
		2-3'	5	4.84	3.51	2.42



Grade	Age	Size	No. Per Bundle	Unit Price		
				Bdl+	100+	500+

Picea pungens glauca (Colorado Blue Spruce)

Seed Origins: Kaibab N.F., Arizona Zone 030 8.2 - 8.7
San Juan N.F., Colorado Zone 246 8.0 - 8.5

To 100', cold hardy to -45°F, USDA Zone 2. Popular ornamental landscape tree, widely planted across North America and Europe. Slow growing and long lived (up to 600+ years), medium size and uniformly pyramidal conical shape, valued for foliage color and natural semi-formal habit, holding lower limbs to the ground. Prickly blue-green 1/2" to 1 1/4" needles are coated with varying degrees of a natural wax giving trees striking, although variable blue-green coloration. Useful for wildlife habitat/shelter, seed released from 3" to 5" pale brown cones provide an important food source for game birds and small mammals. Adaptable to most well-drained soil types. More tolerant of drought and drying winds than other spruce.

Native to the Rocky Mountains from Wyoming, Utah and Colorado south to New Mexico and Arizona. Native Americans used an infusion of the foliage as a cure for colds and stomach problems, typically to help with rheumatism. Branches were used in religious ceremonies and twig tips given as good luck gifts. A valuable tree in deer country with the prickly texture and aromatic fragrance contributing to partial deer resistance. Barren winter landscapes are enhanced by the attractive color of Blue Spruce.

The pyramidal shape makes it a classic choice for a Christmas tree (child and pet resistant), either cut or potted. When used as a windbreak it provides excellent shelter for birds and hooved browsers.

Seedling	2-0	6-9"	50	.90	.65	.45	
		9-12"	25	1.20	.87	.60	
		12-15"	10	1.40	1.02	.70	
Transplant	2-2	12-15"	10	3.64	2.64	1.82	
		15-18"	5	4.74	3.44	2.37	
		18-24"	5	5.50	3.99	2.75	
		2-3	12-15"	10	3.90	2.83	1.95
			15-18"	5	5.20	3.77	2.60
18-24"	5		6.10	4.42	3.05		
		2-3'	5	7.30	5.29	3.65	



Picea pungens glauca 'Majestic Blue'

(Majestic Blue Spruce) To 100', Zone 2. A special seed grown selection reported to have vigorous growth and a bluish green color. Grown from open pollinated seed, expect some natural variability.

Seedling	2-0	3-6"	50	1.32	.96	.66
		6-9"	50	1.66	1.20	.83
		9-12"	25	1.88	1.36	.94
Transplant	2-2	6-9"	10	4.90	3.55	2.45
		9-12"	10	5.60	4.06	2.80
		12-15"	10	6.60	4.79	3.30
		15-18"	5	7.80	5.66	3.90
		2-3	12-15"	10	7.10	5.15
15-18"	5		8.40	6.09	4.20	
18-24"	5		9.80	7.11	4.90	
2-3'	5		11.50	8.34	5.75	

Pinus albicaulis

(Whitebark Pine) To 60', Zone 3. Smooth gray-white exfoliating bark, twigs red-yellow to orange-brown. Tendency to multi-stem habit, shrubby on harsh sites. Large seeds are an important wildlife food source. Occurring naturally at or near tree line in southern British Columbia south to California and east from Montana to Nevada.

Seed Origins: Beartooth Mtns., Montana Mt. Rose, Lake Tahoe, Nevada Zone 772 9.5						
Transplant	P-2	3-6"	25	3.30	2.39	1.65
		6-9"	10	3.50	2.54	1.75
	P-4	3-6"	25	3.80	2.76	1.90
		6-9"	10	4.02	2.92	2.01
		9-12"	10	4.84	3.51	2.42

Pinus banksiana

(Jack Pine) To 70', Zone 2. Northern most pine of North America. Easiest pine to transplant, even on difficult sites. Used for pulpwood and windbreaks.

Seed Origin: Minnesota						
Seedling	2-0	3-6"	50	.66	.48	.33
		6-9"	50	.78	.57	.39
		9-12"	25	.88	.64	.44
		12-15"	10	1.10	.80	.55
Transplant	2-1	9-12"	10	1.58	1.31	1.05
		12-15"	10	1.82	1.51	1.21
		15-18"	5	2.24	1.86	1.49

CULTURAL NOTE

All bareroot conifer spp. require special care in handling, storage and transplanting. Keep the roots moist at all times. Protect from direct sun and exposures to warm temperatures.

Pinus bungeana

(Lacebark Pine) To 75', Zone 5-6. One of the most picturesque but rare pines. Smooth orange, red, brown to gray bark flakes off like a sycamore to expose creamy-white branches and trunk. Often grows with several trunks. Tolerates very hot or dry climates. This pine is in every book on recommended and rare plants.

Transplant	P-2	3-6"	25	2.76	2.00	1.38
		6-9"	10	3.30	2.39	1.65



Pinus contorta contorta

(Shore Pine) To 25', Zone 5-6. One of the best pines for small gardens. Deep rich green foliage. Native on the Pacific Coast from California to Alaska. Adaptable to a wide range of soils and moisture.

Plug	P-0	small plug	25	1.44	1.04	.72
Transplant	P-1	9-12"	10	1.49	1.24	.99
		12-15"	10	1.65	1.38	1.10

Pinus bungeana.

Conifers

Grade	Age	Size	No. Per Bundle	Unit Price		
				Bdl+	100+	500+

Pinus contorta latifolia [☑][☑][☑]

(Rocky Mountain Lodgepole Pine) To 75', Zone 4. Tall slender tree with virtually no taper, thin bark with a clean trunk. Quite ornamental when young. Important species in commercial forestry.

Seed Origins: Lincoln County, Montana 3.0
Lolo N.F., Montana 4.8 - 5.6

Seedling	2-0	6-9"	50	.96	.70	.48
		9-12"	25	1.18	.86	.59
		12-15"	10	1.36	.99	.68
Transplant	2-1	9-12"	10	1.49	1.24	.99
		12-15"	10	1.82	1.51	1.21
		15-18"	5	2.07	1.73	1.38
	2-2	9-12"	10	2.44	1.77	1.22
		12-15"	10	2.80	2.03	1.40
		15-18"	5	3.14	2.28	1.57
		18-24"	5	3.74	2.71	1.87



Pinus contorta latifolia.

Pinus flexilis [☑][☑]

(Limber Pine) To 75', Zone 2. Young trees conical becoming rounded, windswept with age. Dark gray, deeply furrowed bark. Variable species, native range from Alberta to Texas. Widely adaptable. Heat, cold and drought tolerant.

Seed Origin: Beartooth Mtns, Montana 6.5 - 7.5

Seedling	3-0	3-6"	50	1.44	1.04	.72
		6-9"	50	1.66	1.20	.83
		9-12"	25	2.10	1.52	1.05
Transplant	3-2	6-9"	10	3.20	2.32	1.60
		9-12"	10	3.42	2.48	1.71
		12-15"	10	3.86	2.80	1.93



Pinus flexilis.

Pinus koraiensis [☑]

(Korean Pine) To 90', Zone 3. Dark green, winter hardy. Dense, pyramidal form, slow growing, one of the most useful and profoundly beautiful pines for northern landscapes. Produces crops of large, edible pine nuts.

Plug	P-0	small plug	25	1.92	1.39	.96
Transplant	P-2	3-6"	25	4.00	2.90	2.00
		6-9"	10	4.50	3.26	2.25



Pinus koraiensis plugs.

Grade	Age	Size	No. Per Bundle	Unit Price		
				Bdl+	100+	500+

Pinus leucodermis [☑][☑]

(Bosnian Pine) To 20', Zone 5. Compact dwarf, growing 3-6" per year. Excellent for small gardens. One of Europe's most common ornamental pines. Well suited to dry or shallow soils.

Seedling	3-0	3-6"	50	1.16	.84	.58
		6-9"	50	1.32	.96	.66
Transplant	3-3	6-9"	10	3.10	2.25	1.55
		9-12"	10	3.50	2.54	1.75

Pinus monticola [☑][☑]

(Western White Pine) To 90', Zone 5. Beautiful specimen tree, produces high quality lumber. Symmetrical branching in young trees especially attractive. Grown with seed collected from trees phenotypically resistant to blister rust. Native across the northwest from British Columbia to central California and east to the Rocky Mountains of Montana.

Seed Origin: Northern Idaho

Transplant	2-3	12-15"	10	2.50	1.81	1.25
		15-18"	5	3.30	2.39	1.65
		18-24"	5	4.50	3.26	2.25
		2-3'	5	5.50	3.99	2.75

Pinus mugo pumilio

(Dwarf Mugo Pine) To 6', Zone 3-6. The ultimate Dwarf Mugo Pine. Very drought tolerant, low, dense-compact form. Grown from seed gathered in the mountains of eastern Europe.

Seed Origin: Eastern Europe

Plug	P-0	small plug	25	2.50	1.81	1.25
------	-----	------------	----	------	------	------

Pinus nigra [☑][☑]

(Austrian Pine) To 90', Zone 4. Fast growing, widely planted species in landscaping, along roads, for dense windbreaks or screens and commercial Christmas tree plantations. Very adaptable to wind, cold, smog, salt and from heavy clay to sandy soils.

Transplant	2-1	9-12"	10	1.62	1.35	1.08
		12-15"	10	1.76	1.46	1.17
		15-18"	5	2.03	1.69	1.35
	2-2	12-15"	10	2.60	1.89	1.30
		15-18"	5	3.00	2.18	1.50
		18-24"	5	3.92	2.84	1.96
		2-3'	5	4.60	3.34	2.30



Pinus strobus (Eastern White Pine)

Seed Origin: Lake States - MI, WI

[☑][☑][☑] Long lived, may exceed 450 years, five needle pine, up to 150' at maturity, rounded crown becoming flattened and irregular. Horizontal tiered branches give a layered look. Soft, bluish green needles. Fast growing. Ornamental, used in large gardens and parks where it's eventual size can be appreciated. Planted 8-15' apart, with regular shearing they are one of only a few pines that can be trained as a soft needle hedge or screen. Excellent tree for reforestation, shelterbelts. Susceptible to injury from road salt. Provides shelter and food for birds and small mammals.

Popular live or cut Christmas tree. Good needle retention long after harvest, good color and easily sheared. With little to no scent it is well suited for people with allergies. A 6' tree can be reached in 6-8 years. The soft needles used extensively for holiday wreaths and garlands. Important commercial softwood timber tree. Smooth textured, fine grained wood, used in construction, interior and exterior finishing, furniture, cabinets and carvings. Many colonial buildings still standing today used Eastern White Pine for paneling, floors and furniture.

Native to eastern North America from Newfoundland west to the Great Lakes region, south along the Mississippi Basin and Appalachian Mountains to northernmost Georgia and Mississippi preferring cool humid climates. Full sun, well drained soil. White Pine Blister Rust and White Pine Weevil susceptible. Native Americans used the inner bark medicinally and as a food source. The cambium layer can be pounded and used as a flour. Linnaeus noted in the 18th century that cattle and pigs fed pine bark bread grew well, but he personally did not like the taste. Seeds are sweet and nutritious. Pine tar is produced from the wood. Resin was used to waterproof baskets, pails and boats and medicinally to treat infections.

During colonial times the British Navy hand selected specimens with tall straight trunks to be cut for ship masts. They would mark a tree with the "broad arrow". It was illegal for anyone else to cut one of these trees creating strife between the colonists and the British. This played a significant role in the events leading up to the American Revolution. It was considered great sport for the patriots to see how many of the King's trees could be cut down and hauled off. Known in England as Weymouth Pine named after Captain George Weymouth of the British Navy who planted it in Britain as a timber crop, but had little success.

Seedling	3-0	6-9"	50	.64	.46	.32
		9-12"	25	.70	.51	.35
		12-15"	10	.86	.62	.43
Transplant	3-2	9-12"	10	2.08	1.51	1.04
		12-15"	10	2.54	1.84	1.27
		15-18"	5	2.88	2.09	1.44
		18-24"	5	3.22	2.33	1.61
		2-3'	5	3.56	2.58	1.78

Grade	Age	Size	No. Per Bundle	Unit Price		
				Bdl+	100+	500+

Pinus ponderosa [☑][☑][☑]

(Ponderosa Pine, Western Yellow Pine) To 200', Zone 4. Fast growing forest and timber tree. Frequently used as a rootstock for three and five needle pines. Increased landscape use in Intermountain West.

Seed Origins: Flathead N.F., Montana
San Isabel N.F., Zone 502 7.0 - 8.0
Silverbow County, Montana 5.1 - 5.7

Seedling	2-0	3-6"	50	.80	.58	.40
		6-9"	50	.96	.70	.48

Pinus ponderosa scopulorum [☑][☑][☑]

(Black Hills Ponderosa Pine) To 150', Zone 4. Black Hills, South Dakota seed source preferred for difficult, dry locations. Bark is nearly black, deeply furrowed. Suited for ornamental, wildlife or timber plantings.

Seed Origin: Black Hills N.F., South Dakota Zone 621 4.8 - 5.2

Seedling	2-0	3-6"	50	.88	.64	.44
		6-9"	50	1.02	.74	.51
		9-12"	25	1.22	.88	.61

Pinus strobiformis [☑][☑][☑]

(Southwestern White Pine) To 75', Zone 5. Ornamental five needle pine known for soft bluish green needles. Occurring naturally in mountains of Arizona, New Mexico, southeast Colorado, west Texas and south into Mexico. Heat and drought tolerant.

Seed Origins: Apache N.F., Arizona - 8.0 to 9.0
Lincoln N.F., New Mexico Zone 840 - 8.0

Plug	P-0	medium plug	10	1.34	.97	.67
------	-----	-------------	----	------	-----	-----

Seedling	2-0	3-6"	50	.96	.70	.48
		6-9"	50	1.18	.86	.59

Transplant	P-2	6-9"	10	1.80	1.31	.90	
		9-12"	10	2.20	1.60	1.10	
		12-15"	10	2.40	1.67	1.15	
		15-18"	5	2.80	2.03	1.40	
		2-2	9-12"	10	2.20	1.60	1.10
			12-15"	10	2.40	1.67	1.15
		15-18"	5	2.80	2.03	1.40	
		18-24"	5	3.20	2.32	1.60	



Conifers

Grade	Age	Size	No. Per Bundle	Unit Price		
				Bdl+	100+	500+

Pinus sylvestris 'Austrian Hills' (Scotch Pine Austrian Strain) To 60', Zone 3-4. A fast growing strain very similar to French Blue strain but from a higher elevation. Recommended for colder, drier climates where French Blue may burn.

Seed Origin: Austria, Hungary

Seedling	2-0	6-9"	50	.92	.67	.46
		9-12"	25	1.16	.84	.58
		12-15"	10	1.38	1.00	.69
Transplant	2-1	12-15"	10	1.98	1.65	1.32
		15-18"	5	2.15	1.79	1.43
		18-24"	5	2.57	2.14	1.71
	2-2	15-18"	5	3.34	2.42	1.67
		18-24"	5	3.80	2.76	1.90
		2-3'	5	4.72	3.42	2.36



Pinus sylvestris 'Austrian Hills'

Pinus sylvestris 'Auvergne' (Scotch Pine French Blue Strain) To 60', Zone 3. Most ornamental and popular strain of Scotch Pine. Preferred strain for Christmas trees; shears well, good needle retention. Best winter color of all.

Seed Origin: Massif Central-Haute, France

Seedling	2-0	3-6"	50	.70	.51	.35
		6-9"	50	.84	.61	.42
		9-12"	25	.96	.70	.48
Transplant	2-1	9-12"	10	1.58	1.31	1.05
		12-15"	10	1.83	1.53	1.22
		15-18"	5	2.25	1.88	1.50
	2-2	15-18"	5	3.58	2.60	1.79
		18-24"	5	3.92	2.84	1.96
		2-3'	5	4.66	3.38	2.33



Pinus sylvestris 'Auvergne'

Pinus thunbergii (Japanese Black Pine) To 80', Zone 5. Widely planted ornamental tree in wet or dry climates. Shears best of any pine. Excellent Christmas tree if sheared.

Seedling	2-0	6-9"	50	1.18	.86	.59
		9-12"	25	1.40	1.02	.70
		12-15"	10	1.62	1.17	.81
Transplant	2-1	6-9"	10	1.50	1.25	1.00
		9-12"	10	1.73	1.44	1.15
		12-15"	10	2.03	1.69	1.35
	2-2	15-18"	5	4.00	2.90	2.00
		18-24"	5	5.00	3.63	2.50
		2-3'	5	5.50	3.99	2.75

Pinus wallichiana (Himalayan White Pine) To 150', Zone 5. Native to high elevations 7,000-12,000'. Beautiful pine, strongly recommended. Soft blue-green texture, five needle pine. Single specimen will develop long, dense horizontal branches to the ground. Ornamental persistent cones.

Seed Origin: India

Seedling	3-0	6-9"	50	2.10	1.52	1.05
		9-12"	25	2.54	1.84	1.27
		12-15"	10	3.08	2.23	1.54
Transplant	3-2	9-12"	10	4.16	3.02	2.08
		12-15"	10	4.86	3.52	2.43
		15-18"	5	5.78	4.19	2.89
		18-24"	5	6.60	4.79	3.30

Grade	Age	Size	No. Per Bundle	Unit Price		
				Bdl+	100+	500+

Pseudotsuga menziesii (West Coast Douglas Fir) To 250', Zone 6. West Coast origins for rapidly growing Christmas tree stock and reforestation. Grown from seed origins which have proven to culture well for these purposes.

Seed Origin: Washington, Zones 412, 440

Seedling	2-0	6-9"	50	.60	.44	.30
		9-12"	25	.72	.52	.36
		12-15"	10	.84	.61	.42
		15-18"	10	.98	.71	.49
Transplant	1-1	9-12"	10	.90	.75	.60
		12-15"	10	1.05	.88	.70
		15-18"	5	1.20	1.00	.80
	1-2	9-12"	10	1.05	.88	.70
		12-15"	10	1.20	1.00	.80
		15-18"	5	1.35	1.13	.90
		18-24"	5	1.50	1.25	1.00

Pseudotsuga menziesii 'Glaucua' (Blue Douglas Fir) To 250', Zone 4. Rocky Mountain Douglas Fir which is bluer than West Coast origins, much hardier and more widely adapted. Used for native landscaping, Christmas trees and reforestation.

Seed Origin: Northwest Montana, 3.9 - 4.8

Seedling	2-0	6-9"	50	1.10	.80	.55
		9-12"	25	1.30	.94	.65
		12-15"	10	1.60	1.16	.80



Pseudotsuga menziesii 'Glaucua'

Taxodium distichum (Baldcypress) To 150', Zone 4. Outstanding, distinctive shade tree for parks, groves, estates. Takes extremely wet conditions, even swamps. Attractive fern-like foliage.

Plug P-0 large plug 10 2.10 1.52 1.05



Taxodium distichum

Thuja occidentalis (American Arborvitae, White Cedar) To 40', Zone 3. Native to eastern U.S. and Canada. Makes an elegant, narrow hedge either sheared or left to its natural pyramidal shape.

Plug	P-0	small plug	25	1.20	.87	.60
Transplant	P-2	15-18"	5	2.90	2.10	1.45
		18-24"	5	3.30	2.39	1.65



Thuja occidentalis

Grade	Age	Size	No. Per Bundle	Unit Price		
				Bdl+	100+	500+

Thuja orientalis (Oriental Arborvitae) To 50', Zone 5. Shrubby form is common but tree form from which they originate is rare. Less cold hardy than *Thuja occidentalis* but tolerates heat and humidity better.

Plug	P-0	medium plug	10	1.34	.97	.67
Transplant	P-1	12-15"	10	1.65	1.38	1.10
		15-18"	5	2.33	1.94	1.55
		18-24"	5	2.63	2.19	1.75



Thuja orientalis

Thuja plicata - Coastal (Giant Arborvitae or Western Red Cedar) To 180', Zone 6. The best of all the Arborvitae for ornamental use. Lustrous dark green leaves. Vigorous fast growing ornamental tree. Important commercial timber species. Best for coastal locations.

Plug P-0 small plug 25 1.66 1.20 .83

Thuja plicata - Interior (Giant Arborvitae or Western Red Cedar) To 180', Zone 5. Grown with seed collected in northwestern Montana from native stands. Prefers moist sites along streams, creeks, lakes and bogs. Forms picturesque buttressed trunks over time. Shade tolerant, fastest growth in full sun.

Seed Origin: Western Montana 2.5-3.0

Plug	P-0	small plug	25	1.66	1.20	.83
Transplant	P-1	12-15"	10	2.03	1.69	1.35
		15-18"	5	2.93	2.44	1.95
		18-24"	5	3.38	2.81	2.25



Thuja plicata - Interior

Tsuga heterophylla - Coastal (Western Hemlock -Coastal) To 120', Zone 4. Very fast growing, native to western North America. Not tolerant of dry conditions, needs high humidity and moist soil conditions.

Seed Origin: Coastal Washington Zone 030 05 - 2.0

Plug	P-0	medium plug	10	1.30	.94	.65
Transplant	P-1	9-12"	10	1.58	1.31	1.05
		12-15"	10	1.80	1.50	1.20
		15-18"	5	2.07	1.73	1.38

Tsuga mertensiana (Mountain Hemlock) To 90', Zone 5. Pacific Northwest native from central Sierra Nevada mountains of California into coastal Alaska, east to Rocky Mountains in Montana. Variable habit depending on site conditions, from shrubby to tree form. Silvery-blue foliage. Useful ornamental for sunny to partially shaded areas, can be sheared.

Seed origin: Mt. Shasta, California 7.0

Plug	P-0	medium plug	10	1.88	1.36	.94
Transplant	P-1	6-9"	10	1.28	1.06	.85
		9-12"	10	1.43	1.19	.95