**Guide to the Rating of Tree Species in Kentucky**

**(Alphabetical by Botanical Name)** (1)

**Kentucky Regional Plant Appraisal Committee**

| ***Species* (USDA Zone)****(common name)****USFS spp. code** | **% Rating** | **Size**(2)**:** | **Traits:** |
| --- | --- | --- | --- |
| High (feet) | Wide (feet) | Growth Rate (3)(S, M, F) | Lifespan (4)(S, M, L) | Invasive or weedy (5)(N, M, S) | Litter (6)(N, M, S)(L, Fl, Fr, T) | PavementDisplacement (7)(N, M, S) | Biotic &/or Abiotic Problems (8)(N, A, M, E) |
| *Abies balsamea* (3-5)(balsam fir)ABBA | 10-20 | 45 | 20 | S | S | N | N | N | M(root rot, stem cankers, environmental) |
| *Abies cilicica* (5-7)(Cilician fir)AB | 70-80 | 60 | 30 | S | S-M | N | N | N | M(root rot, stem cankers, environmental) |
| *Abies concolor* (4-7)(white fir)ABCO | 60-70 | 40 | 20 | S-M | M | N | N | N | M(environmental) |
| *Abies fraseri* (4-7)(Fraser fir)ABFR | 20-30 | 40 | 20 | S | S | N | N | N | M(root rot, stem cankers, environmental) |
| *Abies nordmanniana* (4-6)(Nordmann fir)ABNO | 60-70 | 50 | 20 | S-M | M | N | N | N | N |
| *Abies procera* (5-6)(noble fir)ABPR | 30-40 | 50 | 20 | S | S | N | N | N | M(root rot, stem cankers, environmental) |
| *Acer buergerianum* (5-8)(trident maple)ACBU | 70-80 | 35 | 35 | M | M | N | N | N | N |
| *Acer campestre* (5-8)(hedge maple)ACCA | 80-90 | 25 | 25 | M | L-M | N-M | N | N | N |
| *Acer diabolicum* (5-7)(devil’s maple)AC | 60-70Changed from 30-40 | 20 | 20 | M | M | N | N | N | N |
| *Acer griseum* (5-7)(paperbark maple)ACGR | 80-90 | 20 | 15 | S | M | N | N | N | N |
| *Acer griseum* x *maximowicziana* (5-7)(Girard maple)AC | 70-80 | 20 | 15 | S | M | N | N | N | N |
| *Acer japonicum* (5-7)(fullmoon maple)ACJA2 | 40-50Changed from 60-70 | 20 | 20 | S-M | S | N | N | N | A, M(environmental) |
| *Acer maximowiczianum* (5-7)(nikko maple)AC | 60-70 | 20 | 20 | M | M | N | N | N | N |
| *Acer miyabei* (4-8)(miyabe maple)AC | 80-90 | 30 | 25 | M | M | N | N | N | N |
| *Acer negundo* (3-9)(boxelder)ACNE | 20-30 | 30 | 20 | F | M | M-S | M(L,Fr,T) | S | A |
| *Acer palmatum* (6-8)(Japanese maple)ACPA | 60-70 | 20 | 20 | S | S | N | N | N | A, M(environmental) |
| *Acer pensylvanicum* (3-7)(striped maple)ACPE | 20-30 | 20 | 15 | M | S | N | N | N | M(environmental) |
| *Acer platanoides* (4-7)(Norway maple)ACPL | 30-40 | 40 | 30 | F | S | M | M(L,Fr) | S | E(verticillium, sunscald) |
| *Acer pseudoplatanus* (4-7)(sycamore maple)ACPS | 30-40 | 40 | 30 | M | M | M | M(L,Fr) | S | M(verticillium) |
| *Acer rubrum* (3-9)(red maple, seedling forms)ACRU | 60-70 | 40 | 30 | F | M | M | M(Fr) | S | N, M(pH, girdling roots, environmental, verticillium) |
| *Acer rubrum* (3-9)(red maple, improved cultivars)ACRU | 70-80lower? | 40 | 30 | F | M | M | M(Fr) | S | N, M(pH, girdling roots, environmental, verticillium) |
| *Acer saccharinum* (3-9)(silver maple, water maple)ACSA1 | 60-70 | 50 | 35 | F | M | M | M(L,Fr,T) | S | N, M |
| *Acer saccharum* (4-8)(sugar maple)ACSA2 | 70-80 | 60 | 40 | M | L | M | M(Fr) | S | N(environmental, girdling roots, verticillium) |
| *Acer saccharum nigrum* (4-8)(black maple)ACNI | 70-80 | 60 | 40 | M | L | M | M(Fr) | S | N |
| *Acer spicatum* (3-7)(mountain maple)ACSP | 20-30 | 15 | 15 | M | S | N | N | N | M(environmental) |
| *Acer tegmentosum* (4-7)(Manchustriped maple)AC | 20-30 | 20 | 20 | M | S | N | N | N | M(environmental) |
| *Acer tataricum* (3-8)(Tatarian maple)ACTA | 50-60 | 18 | 15 | F | S | M-S | N | N | N |
| *Acer tataricum ginnala* (3-8)(Amur maple)ACGI | 60-70 | 18 | 15 | F | S | M-S | N | N | N |
| *Acer truncatum* (4-8)(shantung maple)ACTR | 80-90 | 30 | 30 | S-M | S-M | N | N | N | N |
| *Aesculus* x*carnea* (5-7)(red horsechestnut)AE | 60-70 | 30 | 30 | M | M | N | M(Fr) | M | A(powdery mildew, leaf scorch) |
| *Aesculus flava* (4-8)(yellow buckeye)AEFL | 60-70 | 60 | 60 | M | M | N | M(Fr,T) | M | A(leaf scorch) |
| *Aesculus glabra* (3-7)(Ohio buckeye)AEGL | 60-70 | 50 | 30 | M | M | N | M(L,Fr,T) | M | A(powdery mildew, leaf scorch) |
| *Aesculus hippocastanum* (4-7)(common horsechestnut)AEHI | 60-70 | 50 | 40 | M | M | N | M(L,Fr,T) | M | A(powdery mildew, leaf scorch) |
| *Aesculus parviflora* (4-8)(bottlebrush buckeye)AEPA2 | 80-90 | 10 | 12 | M | M | N | N | N | N |
| *Aesculus pavia* (4-8)(red buckeye)AEPA | 60-70 | 18 | 15 | S-M | M | N | N | N | A(powdery mildew, leaf scorch) |
| *Ailanthus altissima* (4-8)(tree of heaven)AIAL | 10-20 | 40 | 30 | F | M | S | M(Fr,T) | S | N |
| *Albizia julibrissin* (6-9)(mimosa)ALJU | 10-20 | 20 | 20 | F | S | S | M(Fl,Fr,T) | N | M(environmental, fusarium) |
| *Alnus glutinosa* (4-7)(European black alder)ALGL | 40-50 | 40 | 20 | F | M | S (wet areas) | M(L,Fr) | M | A(adelgid) |
| *Amelanchier arborea* (4-9)(downy serviceberry)AMAR | 60-70 | 15 | 10 | F | M | N | N | N | N, A(Japanese beetle) |
| *Amelanchier canadensis* (3-7)(common serviceberry)AMCA | 60-70 | 12 | 10 | F | M | N | N | N | N, A(Japanese beetle) |
| *Amelanchier* x*grandiflora* (4-9)(apple serviceberry)AM | 70-80 | 15 | 10 | F | M | N | N | N | N, A(Japanese beetle) |
| *Amelanchier laevis* (4-8)(Allegheny serviceberry)AMLA | 70-80 | 15 | 10 | F | M | N | N | N | N, A(Japanese beetle) |
| *Aralia elata* (4-9)(Japanese angelica)AREL8 | 60-70 | 20 | 15 | F | S | N-M (suckers) | M(Fr) | N | N |
| *Aralia spinosa* (4-9)(devil’s walkingstick)ARSP | 60-70 | 15 | 10 | F | S | M | M(Fr) | N | N |
| *Asimina triloba* (5-8)(pawpaw)ASTR | 70-80 | 15 | 15 | M | S | N-M (suckers) | M(Fr) | N | N |
| *Betula lenta* (3-7)(sweet birch, black birch)BELE | 60-70 | 40 | 35 | M-F | S | N | N | N | M(environmental) |
| *Betula lutea* (3-7)(yellow birch)BEAL | 60-70 | 60 | 35 | M-F | S | N | N | N | M(environmental) |
| *Betula maximowicziana* (5-6)(monarch birch)BE | 40-50Changed from 50-60 | 45 | 30 | F | S | N | N | N | M(borer, environmental) |
| *Betula nigra* (3-9)(river birch)BENI | 60-70 | 40 | 30 | F | M | N | M(L,T) | M | A(aphids, pH, leaf spot) |
| *Betula papyrifera* (2-6)(paper birch)BEPA | 20-30 | 25 | 18 | F | S | N | N | N | E(borer, environmental) |
| *Betula pendula* (2-6)(European white birch)BEPE | 20-30 | 25 | 18 | F | S | N | N | N | E(borer, environmental) |
| *Betula platyphylla* (5-6)(Japanese white birch)BEPL2 | 30-40 | 30 | 20 | F | S | N | N | N | M(borer, environmental) |
| *Betula populifolia* (3-6)(gray birch)BEPO | 30-40Changed from 50-60 | 30 | 15 | F | S | N | N | N | M(borer, environmental) |
| *Caragana arborescens* (2-6)(Siberian peashrub)CAAR | 10-20 | 15 | 12 | S | S | N | N | N | E(environmental) |
| *Carpinus betulus* (5-7)(European hornbeam)CABE | 70-80 | 40 | 30 | F | S-M | N | N | N | N(borer) |
| *Carpinus caroliniana* (3-9)(American hornbeam)CACA | 70-80 | 20 | 20 | M-F | M | N | N | N | N |
| *Carpinus cordata* (5-6[7])(heartleaf hornbeam)CA40 | 70-80 | 20 | 18 | F | M | N | N | N | N |
| *Carpinus japonica* (5-7)(Japanese hornbeam)CA40 | 70-80 | 20 | 20 | F | M | N | N | N | N |
| *Carya aquatica* (6-9)(water hickory, bitter pecan)CAAQ | 40-50 | 50 | 35 | S | L | N | N | S | N |
| *Carya cordiformis* (4-9)(bitternut, pignut)CACO | 60-70 | 50 | 40 | S | L | N | M(Fr) | S | N |
| *Carya glabra* (4-9)(pignut)CAGL | 50-60 | 50 | 25 | S | L | N | M(Fr) | S | N |
| *Carya illinoinensis* (5-9)(pecan)CAIL | 60-70 | 70 | 40 | S-M | L | N | M(L,Fr) | S | A(aphids, sooty mold) |
| *Carya laciniosa* (5-8)(shellbark hickory)CALA | 70-80 | 60 | 40 | S-M | L | N | M(Fr, Bark) | S | N |
| *Carya ovata* (4-8)(shagbark hickory)CAOV | 70-80 | 60 | 35 | S | L | N | M(Fr, Bark) | S | N |
| *Carya pallida* (6-9)(sand hickory)CAPA | 40-50 | 60 | 35 | S | L | N | M(Fr) | S | N |
| *Carya tomentosa* (4-9)(mockernut hickory)CATO | 60-70 | 50 | 25 | S | L | N | M(Fr) | S | N |
| *Castanea dentata* (4-8)(American chestnut; blight resistant hyb.)CADE | 40-50 | 60 | 25 | S | S | N | M-E(Fr) | M | M(phytophthora) |
| *Castanea mollissima* (4-8)(Chinese chestnut)CAMO | 40-50 | 40 | 40 | S | M | N | M-E(Fr) | M | N |
| *Catalpa bignonioides* (5-9)(common catalpa)CABI | 60-70 | 50 | 30 | F | M | N-M | M(L,Fr) | S | N,E(verticillium) |
| *Catalpa speciosa* (4-8)(northern catalpa)CASP | 60-70 | 50 | 30 | F | M | N-M | M(L,Fr) | S | N,E(verticillium) |
| *Cedrus libani atlantica* (6-9)(Atlas cedar)CEAT | 60-70 | 40 | 40 | M | M | N | N | M | N,M(environmental) |
| *Cedrus libani deodara* (7-8)(deodar cedar)CEDE | 30-40  | 40 | 40 | M | M | N | N | M | E(environmental) |
| *Cedrus libani stenocoma* (5-7)(hardy cedar of Lebanon)CELI | 70-80 | 40 | 40 | M | M | N | N | M | N,M(environmental) |
| *Celtis laevigata* (5-9)(sugar hackberry)CELA | 70-80 | 40 | 30 | M | M | N | M(Fr) | M | N |
| *Celtis occidentalis* (3-9)(common hackberry)CEOC | 60-70 | 40 | 35 | M | M | M | M(L,Fr) | S | A(nipple gall) |
| *Cercidiphyllum japonicum* (4-8)(katsuratree)CEJA | 80-90 | 40 | 20 | M | M | N | N | N | N |
| *Cercis canadensis* (4-9)(eastern redbud)CECA | 60-70 | 20 | 25 | F | S | M | M(Fr) | N | M(borer, canker, verticillium) |
| *Chamaecyparis lawsoniana* (5-7)(Lawson falsecypress)CHLA2 | 30-40 | 20 | 12 | F | S | N | N | N | E(canker, environmental) |
| *Chamaecyparis nootkatensis* (4-7)(Alaska cedar)CHNO | 50-60 | 30 | 15 | M-F | S | N | N | N | A,M(environmental) |
| *Chamaecyparis obtusa* (5-8)(hinoki falsecypress)CHOB | 50-60 | 25 | 7 | F | S | N | N | N | A,M(environmental) |
| *Chamaecyparis pisifera* (4-8)(sawara falsecypress)CAPI | 50-60 | 40 | 20 | F | S | N | N | N | M(environmental) |
| *Chionanthus retusus* (6-8)(Chinese fringetree)CHRE | 70-80 | 15 | 20 | M | M | N | N | N | N |
| *Chionanthus virginicus* (4-9)(white fringetree)CHVI | 70-80 | 20 | 25 | M | M | N | N | N | M(borer) |
| *Cladrastis kentukea* (4-8)(Kentucky yellowwood)CLLU | 70-80 | 30 | 40 | M | M | N | N(T) | N | N |
| *Cornus alternifolia* (3-7)(pagoda dogwood)COAL | 60-70 | 15 | 20 | M | S-M | N | N | N | N |
| *Cornus amomum* (4-8)(silky dogwood)COAM2 | 60-70 | 6 | 6 | M | M | N | N | N | N |
| *Cornus florida* (5-9)(flowering dogwood)COFL | 60-70 | 20 | 20 | M | M | N | N | N | M(borer, powdery mildew, leaf/twig anthracnose, environmental) |
| *Cornus kousa* (5-8)(kousa dogwood)COKO | 60-70 | 20 | 20 | S-M | M | N | N (Fr) | N | M(environmental) |
| *Cornus mas* (4-7)(cornelian cherry dogwood)COMA | 80-90 | 20 | 15 | M | M | N | N | N | N |
| *Cornus officinalis* (5-8)(Japanese cornelian cherry dogwood)CO1 | 80-90 | 20 | 20 | M | M | N | N | N | N |
| *Cornus racemosa* (3-8)(gray dogwood)CORA | 60-70 | 10 | 10 | M | M | N | N | N | N |
| *Corylus americana* (4-9)(American filbert)COAM | 50-60 | 10 | 10 | M | M | N | N | N | A(Japanese beetle, canker) |
| *Corylus avellana* ‘Contorta’ (4-8)(contorted filbert, Harry Lauder’s walking stick)COAV | 50-60 | 8 | 8 | M | M | N | N | N | A(Japanese beetle, canker, blight) |
| *Corylus colurna* (4-7)(Turkish filbert)COCO2 | 70-80 | 40 | 30 | M | S-M | N | N | N | A(Japanese beetle) |
| *Corylus maxima* (4-8)(giant filbert)COMA2 | 40-50 | 15 | 18 | M | M | N | N | N | A(Japanese beetle) |
| *Cotinus coggygria* (5-8)(smoketree)COCO1 | 50-60 | 15 | 15 | F | S | N | N | N | M, E(verticillium) |
| *Cotinus obovatus* (4-8)(American smoketree)COOB | 60-70 | 20 | 15 | F | M | N | N | N | M,E(verticillium) |
| *Crataegus crus-galli* (4-6[7])(cockspur hawthorn)CRCR | 50-60 | 20 | 20 | M | M | N | M(Fr) | N | A(quince rust) |
| *Crataegus* x*lavalleei* (4-7)(lavalle hawthorn)CR | 60-70 | 15 | 15 | M | M | N | N | N | A(quince rust) |
| *Crataegus phaenopyrum* (4-8)(Washington hawthorn)CRPH | 60-70 | 25 | 20 | M | M | N | M(Fr) | N | A(quince rust) |
| *Crataegus viridis* ‘Winter King’ (4-7)(winter king hawthorn)CRVI | 60-70 | 20 | 20 | M | M | N | M(Fr) | N | A(quince rust) |
| x*Cupressocyparis leylandii* (6-10)(Leyland cypress)CULE | 10-20 | 20 | 7 | F | S | N | M(L) | N | E(canker) |
| *Diospyros virginiana* (4-9)(persimmon)DIVI | 60-70 | 45 | 30 | M | L | N | M(Fr) | M | N |
| *Elaeagnus angustifolia* (2-7)(Russian olive)ELAN | 10-20 | 12 | 15 | F | S | S | M(L,T) | N | M(verticillium) |
| *Eucommia ulmoides* (5-7)(hardy rubbertree)EUUL | 80-90 | 40 | 40 | M | M | N | N | M | N |
| *Euonymus alatus* (4-8)(burningbush)EULA | 20-30 | 15 | 15 | F | M | S | N | N | A(mites) |
| *Euonymus bungeanus* (4-7)(winterberry euonymus)EUBU | 20-30 | 20 | 20 | F | M | N | N | N | A(scale) |
| *Euonymus europaeus* (4-7)(European spindletree)EUEU | 20-30 | 12 | 10 | F | M | N | N | N | A(scale) |
| *Fagus grandifolia* (4-9)(American beech)FAGR | 80-90 | 50 | 45 | M | L | N | N-M(Fr) | M | N,M(environmental) |
| *Fagus sylvatica* (4-7)(European beech)FASY | 80-90 | 50 | 35 | M | L | N | N-M(Fr) | M | N, M(environmental) |
| *Franklinia alatamaha* (5-8)(Franklin tree)FRAL | 40-50Suggestion made to change to 60-70 | 15 | 15 | M | S | N | N | N | M, E(environmental) |
| *Fraxinus americana* (4-9)(white ash, untreated for EAB)FRAM | 10-20 | 50 | 45 | F | S | M | M(Fr,T) | S | E(borer) |
| *Fraxinus americana* (4-9)(white ash, treated for EAB)FRAM | 60-70 | 50 | 45 | F | L | M | M(Fr) | S | N |
| *Fraxinus excelsior* (5-7)(European ash, untreated for EAB)FR | 10-20 | 30 | 20 | F | S | M | M(Fr,T) | S | E(borer) |
| *Fraxinus excelsior* (5-7)(European ash, treated for EAB)FR | 20-30 | 30 | 20 | F | M | M | M(Fr,T) | S | M(borer) |
| *Fraxinus nigra* (2-6)(black ash, untreated for EAB)FRNI | 10-20  | 30 | 20 | F | S | M | M(Fr,T) | S | E(borer) |
| *Fraxinus nigra* (2-6)(black ash, treated for EAB)FRNI | 20-30 | 30 | 20 | F | M | M | M(Fr) | S | M(borer) |
| *Fraxinus pennsylvanica* (3-9)(green ash, untreated for EAB)FRPE | 10-20 | 50 | 30 | F | S | M | M(Fr,T) | S | E(borer) |
| *Fraxinus pennsylvanica* (3-9)(green ash, treated for EAB)FRPE | 40-50 | 50 | 30 | F | L | M | M(Fr) | S | N |
| *Fraxinus quadrangulata* (4-7)(blue ash, untreated for EAB)FRQU | 20-30 | 50 | 30 | F | M | N | M(Fr,T) | S | M(borer) |
| *Fraxinus quadrangulata* (4-7)(blue ash, treated for EAB)FRQU | 60-70 | 50 | 30 | F | L | N | M(Fr) | S | N |
| *Ginkgo biloba* (4-8)(ginkgo, male) GIBI | 90-100 | 50 | 30 | S-M | L | N | N | M | N |
| *Ginkgo biloba* (4-8)(ginkgo, female) GIBI | 40-50 | 50 | 30 | S-M | L | N | M(Fr) | S | N |
| *Gleditsia aquatica* (4-9)(water locust)GLAQ | 20-30 | 30 | 25 | F | M | N | M(L,T) | M | M(borer, canker, leaf feeding insects) |
| *Gleditsia triacanthos* (4-9)(thorny honeylocust)GLTR | 20-30 | 30 | 25 | F | M | N | M-S(L,Fr,T) | M | M(borer, canker, leaf feeding insects) |
| *Gleditsia triacanthos inermis* (4-9)(thornless honeylocust)GLTR | 60-70 | 30 | 25 | F | M | N | M-S(L,Fr,T) | M | M(borer, canker, leaf feeding insects) |
| *Gymnocladus dioica* (3-8)(Kentucky coffeetree, female)GYDI | 80-90 | 60 | 40 | M | L | N | M-S(L,Fr) | M | N |
| *Gymnocladus dioica* (3-8)(Kentucky coffeetree, male)GYDI | 90-100 | 60 | 40 | M | L | N | M(L) | M | N |
| *Halesia tetraptera* (4-8)(silverbell)HATE3 | 70-80 | 30 | 20 | S | M | N | N | N | M(scale, environmental) |
| *Hamamelis mollis* (5-8)(Chinese witchhazel)HA6 | 70-80 | 10 | 10 | M | M | N | N | N | N |
| *Hamamelis virginiana* (3-8)(common witchhazel)HAVI | 70-80 | 20 | 20 | M | M | N | N | N | A(leaf blight) |
| *Heptacodium miconioides* (5-8)(seven-son flower) | 50-60 | 20 | 15 | F | S | N | M(L,Fl,Fr,T,Bark) | N | M(canker) |
| *Hibiscus syriacus* (5-8)(rose of Sharon, non-cultivar)HISY | 20-30 | 8 | 6 | F | S | M-S | N | N | N |
| *Hibiscus syriacus* (5-8)(rose of Sharon, named cultivars)HISY | 60-70 | 8 | 6 | F | S | N | N | N | N |
| *Hydrangea paniculata* (3-8)(peegee hydrangea)HYPA | 70-80 | 10 | 10 | F | S | N | N | N | N |
| *Ilex decidua* (5-9)(possumhaw)ILDE | 80-90 | 10 | 7 | M | M | N | N | N | N |
| *Ilex opaca* (5-9)(American holly)ILOP | 70-80 | 40 | 18 | M | L | N | N | N | N,A(leaf miner) |
| *Ilex pedunculosa* (5-8)(longstalk holly)ILSP | 50-60 | 15 | 15 | S | S | N | N | N | E(verticillium) |
| *Ilex serrata* (5-7)(Japanese winterberry)ILSP | 50-60 | 7 | 7 | S | M | N | N | N | M(root rot) |
| *Juglans cinerea* (3-7)(butternut)JUCI | 50-60 | 40 | 30 | M | L | N | M(L,Fr) | M | E(canker) |
| *Juglans nigra* (4-9)(black walnut)JUNI | 50-60 | 50 | 50 | M | L | N | S(L,Fr) | M | A(fungal leaf spot) |
| *Juglans regia* (6-9)(English walnut)JURE | 50-60 | 50 | 50 | M | L | N | M(L,Fr) | M | A(fungal leaf spot) |
| *Juniperus chinensis* (4-9)(Chinese juniper)JUCH | 80-90 | 50 | 15 | M | M | N | N | N | M(bagworm) |
| *Juniperus communis* (2-6)(common juniper)JUCO1 | 30-40 | 8 | 10 | M | M | N | N | N | M(bagworm) |
| *Juniperus scopulorum* (3-6)(Rocky Mountain juniper)JUSC | 30-40 | 30 | 15 | M | M | N | N | N | M(bagworm) |
| *Juniperus virginiana* (3-9)(eastern redcedar)JUVI | 80-90 | 40 | 15 | F | M | N | N | N | M(bagworm) |
| *Koelreuteria paniculata* (5-8)(golden raintree)KOPA | 70-80 | 30 | 30 | F | M | M | M(Fl,Fr,T) | N | N |
| *Laburnum watereri* (5-6)(golden chaintree)LAWA | 20-30 | 12 | 10 | S | S | N | N | N | E(environmental) |
| *Lagerstroemia fauriei* (6-9)(Japanese crapemyrtle)LA6 | 30-40change? | 30 | 15 | F | M | N | M(Fl) | N | M(environmental, powdery mildew) |
| *Lagerstroemia indica* (7-9)(common crapemyrtle)LAIN | 20-30add 70-80 in west KY | 20 | 10 | F | M | N | M(Fl) | N | M(environmental, powdery mildew) |
| *Larix decidua* (3-6)(European larch)LADE | 60-70 | 70 | 25 | M | L | N | M(L,Fr) | M | N |
| *Larix kaempferi* (4-7)(Japanese larch)LAKA2 | 60-70 | 80 | 30 | M | M | N | M(L,Fr) | M | N |
| *Larix laricina* (2-5)(American larch)LALA | 30-40 | 50 | 20 | M | M | N | M(L) | M | M(environmental) |
| *Liquidambar styraciflua* (5-9)(sweetgum)LIST | 70-80 | 60 | 40 | F | L | M | S(Fr) | S | N |
| *Liriodendron tulipifera* (4-9)(tulip poplar)LITU | 70-80 | 70 | 35 | F | L | M | M-S(L,Fr,T) | S | M(aphids, scale, honeydew, verticillium) |
| *Lonicera maackii* (3-8)(Amur bush honeysuckle)LOMA6 | 10-20 | 12 | 12 | F | M | S | N | N | N |
| *Lonicera tatarica* (3-6)(Tatarian bush honeysuckle)LOTA | 10-20 | 10 | 10 | F | M | S | N | N | N |
| *Maackia amurensis* (4-7)(Amur maackia) | 80-90 | 20 | 20 | M | M | N | N | N | N |
| *Maclura pomifera* (4-9)(Osage orange, male)MAPO | 90-100 | 20 | 20 | M-F | L | N-M | N | S | N |
| *Maclura pomifera* (4-9)(Osage orange, female or unnamed selection)MAPO | 40-50changed from 60-70 | 20 | 30 | F | L | N-M | S(Fr) | S | N |
| *Magnolia* sp. (magnolia, named cultivar or hybrid)MA1 | 70-80 | Variable by Cv. | Variable by Cv. | F | M | N | N | N | A, M(environmental, powdery mildew, scale) |
| *Magnolia acuminata* (4-8)(cucumber magnolia)MAAC | 70-80 | 50 | 50 | F | M | N | M(L,T) | N | N |
| *Magnolia fraseri* (6-9)(Fraser magnolia)MAFR | 60-70 | 15 | 12 | F | S | N | N | N | M(environmental) |
| *Magnolia grandiflora* ([6]7-9)(southern magnolia, outside western KY)MAGR | 60-70 | 60 | 30 | F | M | N | M(L,Fr,T) | M | M(environmental, scale) |
| *Magnolia grandiflora* ([6]7-9)(southern magnolia, in western KY)MAGR | 70-80 | 60 | 30 | F | M | N | M(L,Fr,T) | M | N(scale) |
| *Magnolia heptapeta* (6-9)(Yulan magnolia)MA1 | 70-80 | 35 | 35 | F | M | N | N | N | A(environmental) |
| *Magnolia liliiflora* (5-8)(lily magnolia)MA1 | 70-80 | 10 | 10 | F | M | N | N | N | A(environmental) |
| *Magnolia* x*loebneri* (4-7)(Loebner magnolia)MA1 | 80-90 | 20 | 22 | F | M | N | N | N | A(environmental) |
| *Magnolia macrophylla* (5-8)(bigleaf magnolia)MAMA | 60-70 | 30 | 25 | F | M | N | M(L) | N | N(environmental) |
| *Magnolia* x*soulangiana* (4-9)(saucer magnolia)MASO | 70-80 | 20 | 20 | F | M | N | N(Fl) | N | M(environmental, scale) |
| *Magnolia stellata* (4-8)(star magnolia)MAST | 70-80 | 15 | 10 | M | M | N | N(Fl) | N | A(environmental) |
| *Magnolia tripetala* (5-8)(umbrella magnolia)MATR | 60-70 | 15 | 12 | F | M | N | M(L) | N | N(environmental) |
| *Magnolia virginiana* (5-9)(sweetbay magnolia)MAVI | 80-90 | 20 | 15 | F | M | N | M(L,Fr) | N | N |
| *Magnolia virginiana australis* (6-9)(sweetbay magnolia, southern form)MAVI | 80-90 | 20 | 15 | F | M | N | M(L,Fr) | N | N |
| *Malus* sp. (4-7)(crabapple)MA2 | 50-60changed from 60-70 | Variable by Cv. | Variable by Cv. | M | M | N | M(L,Fr) | N | A(leaf diseases, Japanese beetle, borer) |
| *Malus* sp. (4-7)(crabapple, improved cultivars) MA2 | 70-80 | Variable by Cv. | Variable by Cv. | M | M | N | M(Fr) | N | A(leaf diseases, Japanese beetle, borer) |
| *Malus pumila* (4-7)(apple)MAPU | 20-30changed from 60-70 | 22 | 22 | M | M | N | M(L,Fr) | N | A(leaf diseases, Japanese beetle, borer) |
| *Metasequoia glyptostroboides* (5-8)(dawn redwood)MEGL | 80-90 | 70 | 25 | F | L | N | N | M | N,A(Japanese beetle) |
| *Morus alba* (5-8)(white mulberry, male)MOAL | 30-40 | 30 | 30 | F | S | N | N | N | N |
| *Morus alba* (5-8)(white mulberry, female)MOAL | 10-20 | 30 | 30 | F | S | S | M(Fr) | N | N |
| *Morus rubra* (5-9)(red mulberry)MORU | 20-30 | 40 | 40 | F | S | S | M(Fr) | N | N |
| *Nyssa aquatica* (6-9)(water blackgum)NYAQ | 80-90 | 30 | 20 | M | L | N | N | M | N |
| *Nyssa sylvatica* (4-9)(blackgum)NYSY | 90-100 | 30 | 20 | M | L | N | N | M | N,A(leaf spot) |
| *Ostrya carpinifolia* (3-9)(European hophornbeam)OSCA | 70-80 | 25 | 20 | S | L | N | N | N | N |
| *Ostrya virginiana* (3-9)(hophornbeam)OSVI | 80-90 | 25 | 20 | S | L | N | N | N | N |
| *Oxydendrum arboreum* (5-9)(sourwood)OXAR | 60-70 | 25 | 20 | M | M | N | N | N | N,E(environmental) |
| *Parrotia persica* (5-8)(Persian parrotia)PAPE | 70-80 | 20 | 15 | S | M | N | N | N | N |
| *Paulownia tomentosa* (6-9)(royal paulownia, princesstree)PATO | 20-30 | 30 | 30 | F | M | S | S(L,Fl,Fr,T) | M | N |
| *Phellodendron amurense* (3-7)(Amur corktree)PHAM | 70-80 | 30 | 30 | S | L | M | M(Fr) | M | N |
| *Picea abies* (3-7)(Norway spruce)PIAB | 80-90 add 60-70 in west KY | 40 | 25 | M | M | N | M(Fr) | M | A,E(needle cast, canker, spider mites, environmental) |
| *Picea engelmannii* (3-5)(Engelmann spruce)PIEN | 60-70 | 40 | 12 | M | M | N | N | M | M(needle cast, environmental) |
| *Picea glauca* (2-6)(white spruce)PIGL | 60-70 | 40 | 20 | M | S | N | N | N | M(needle cast, environmental) |
| *Picea omorika* (4-7)(Serbian spruce)PIOM | 70-80 | 50 | 20 | S-M | S-M | N | N | N | A,M(needle cast, environmental) |
| *Picea orientalis* (4-7)(oriental spruce)PI1 | 80-90 | 50 | 20 | M | M | N | N | N | N |
| *Picea pungens* (3-7)(Colorado spruce)PIPU | 70-8020-30(west Ky) | 30 | 15 | S-M | M | N | N | N | A,M(needle cast, canker, spider mites, environmental) |
| *Picea pungens* var. *glauca* (3-7)(blue Colorado spruce)PIPU | 70-8030-40 (west Ky) | 30 | 15 | S-M | M | N | N | N | A,M(needle cast, canker, spider mites, environmental) |
| *Picea rubens* (3-5)(red spruce)PIRU | 50-60 | 20 | 8 | M | M | N | N | N | M(needle cast, environmental) |
| *Pinus banksiana* (2-6)(jack pine)PIBA | 40-50 | 35 | 30 | M | M | N | N | N | M(environmental) |
| *Pinus bungeana* (5-7)(lacebark pine)PIBU | 80-90 | 30 | 20 | S-M | M | N | N | N | N |
| *Pinus cembra* (3-7)(Swiss stone pine)PICE2 | 70-80 | 30 | 15 | S | M | N | N | N | N |
| *Pinus densiflora* (3-7)(Japanese red pine)PIDE | 70-80 | 25 | 25 | S | S | N | N | N | M(pinewood nematode) |
| *Pinus echinata* (6-9)(shortleaf pine)PIEC | 50-60 | 80 | 50 | M | S-M | N | N | M | N(environmental) |
| *Pinus flexilis* (4-7)(limber pine)PIFL | 70-80 | 30 | 15 | M | M | N | N | M | N |
| *Pinus koraiensis* (4-7)(Korean pine)PI2 | 70-80 | 30 | 20 | M | M | N | N | N | N |
| *Pinus mugo* (3-7)(Swiss mountain pine)PIMU | 50-60 | 15 | 25 | S | S | N | N | N | M,E(diplodia, scale) |
| *Pinus nigra* (3-7)(Austrian pine)PINI | 30-40 | 30 | 12 | M | S | N | N | S | E(diplodia) |
| *Pinus parviflora* (4-7)(Japanese white pine)PIPA2 | 70-80 | 25 | 25 | M | M | N | N | M | N |
| *Pinus peuce* (4-7)(Macedonian pine)PI2 | 40-50 | 30 | 15 | M | M | N | N | N | N |
| *Pinus ponderosa* (3-6)(ponderosa pine)PIPO | 40-50 | 45 | 20 | M | S | N | N | M | N(environmental) |
| *Pinus resinosa* (2-5)(red pine)PIRE | 50-60 | 50 | 25 | M | S-M | N | N | M | M(environmental) |
| *Pinus rigida* (4-7)(pitch pine)PIRI | 40-50 | 40 | 30 | S-M | M | N | N | M | N |
| *Pinus strobus* (3-7)(eastern white pine)PIST | 60-7040-50 west KY | 50 | 20 | F | L | N | M(L,Fr) | M | N-M(environmental) |
| *Pinus sylvestris* (3-7)(Scots pine, scotch pine)PISY | 40-50 | 25 | 25 | M | S | N | N | M | E(diplodia) |
| *Pinus taeda* (6-9)(loblolly pine)PITA | 50-6070-80 west Ky | 50 | 30 | M | M | N | M(L,Fr) | M | N(pinebark beetle, canker) |
| *Pinus thunbergii* (6-8)(Japanese black pine)PITH | 40-50 | 25 | 20 | M | S | N | N | M | M(environmental, canker) |
| *Pinus virginiana* (4-8)(Virginia pine)PIVI | 60-70 | 15 | 10 | M | M | N | M(Fr) | M | N |
| *Pinus wallichiana* (5-7)(Himalayan pine)PI2 | 50-60 | 30 | 15 | M | M | N | N | M | N |
| *Pistacia chinensis* (6-9)(Chinese pistache)PICH | 60-70 | 30 | 25 | F | M | N | M(Fl,Fr) | N | M(environmental) |
| *Platanus* x*acerifolia* (5-8)(London planetree)PLAC | 70-80 | 70 | 60 | F | L | N | M-S(L,Fr,T,Bark) | S | A(leaf anthracnose) |
| *Platanus occidentalis* (4-9)(eastern sycamore)PLOC | 70-80 | 75 | 75 | F | L | N | M-S(L,Fr,T,Bark) | S | A(leaf anthracnose) |
| *Platycladus orientalis* (6-11)(Oriental arborvitae)PLOR | 50-60 | 18 | 10 | F | S | N | N | N | A-M(canker, decay. bagworm) |
| *Populus alba* (3-8)(white poplar)POAL | 30-40 | 40 | 40 | F | S | S | M(L,T) | S | M(canker, borer, rust) |
| *Populus deltoides* (3-9)(eastern cottonwood)PODE | 30-40 | 75 | 50 | F | L | M | M(L,Fr,T) | S | A(canker, rust) |
| *Populus nigra* ‘Italica’ (3-9)(Lombardy poplar)PONI | 10-20 | 50 | 10 | F | S | M | M(L,T) | N | E(canker, borer, rust, leafspot) |
| *Prunus americana* (3-8)(wild plum)PRAM | 30-40 | 15 | 15 | M | S | N | M(L,Fr) | N | E(Japanese beetle, borer, canker, environmental) |
| *Prunus armeniaca* (5-7)(apricot)PRAR | 30-40 | 25 | 25 | M | S | N | M(L,Fr) | N | E(Japanese beetle, borer, canker, environmental) |
| *Prunus besseyi* (3-6)(sand cherry)PR | 40-50 | 5 | 5 | F | S | N | N | N | M(Japanese beetle, borer, canker, environmental) |
| *Prunus* x ‘Hally Jolivette’ (5-7)(Hally Jolivette cherry)PR | 60-70 | 15 | 15 | M | M | N | N | N | N(Japanese beetle, leafspot) |
| *Prunus cerasifera* (5-8)(purpleleaf plum)PRCE | 30-40 | 15 | 15 | F | S | N | M(L,T) | N | E(Japanese beetle, borer, canker, environmental) |
| *Prunus sargentii* (4-7)(Sargent cherry)PRSA | 60-70 | 20 | 20 | F | M | N | N | N | A(Japanese beetle, environmental) |
| *Prunus serotina* (3-9)(black cherry)PRSE1 | 30-40 | 50 | 40 | F | M-L | M-S | M(Fr) | S | N(caterpillar) |
| *Prunus serrulata* (5-8)(Japanese flowering cherry)PRSE2 | 60-70 | 20 | 20 | M | M | N | N | N | M(Japanese beetle, borer, canker, environmental) |
| *Prunus subhirtella* (5-8)(Japanese weeping cherry)PRSU | 60-70 | 20 | 15 | F | S | N | N | N | M(Japanese beetle, borer, canker, environmental) |
| *Prunus virginiana* (2-6)(chokecherry)PRVI | 40-50 (changed from 60-70) | 20 | 18 | F | M | N | N | N | M(Japanese beetle, borer, environmental) |
| *Prunus* x*yedoensis* (5-8)(Yoshino cherry)PRYE | 60-70 | 20 | 20 | M | M | N | N | N | M(Japanese beetle, borer, canker, environmental) |
| *Pseudolarix kaempferi* (5-7)(golden larch)PS8 | 70-80 | 30 | 20 | M | M | N | N-M(L,Fr) | M | M(environmental) |
| *Pseudotsuga menziesii* (4-6)(Douglas fir)PSME | 60-7050-60 west Ky | 40 | 15 | S-M | M | N | N | M | M(environmental) |
| *Pyrus calleryana* (5-8)(Callery pear)PYCA | 10-20 | 30 | 20 | F | S | S | M(FL,Fr) | M-S | N-M(fireblight, canker) |
| *Quercus acutissima* (6-9)(sawtooth oak)QUAC | 80-90 | 40 | 35 | M | L | N-M | M(Fr) | S | N |
| *Quercus alba* (3-9)(white oak)QUAL | 90-100 | 50 | 50 | M | L | N | M(Fr) | S | N(gall) |
| *Quercus bicolor* (4-8)(swamp white oak)QUBI | 90-100 | 50 | 50 | M | L | N | M(Fr) | S | N |
| *Quercus cerris* (5-7)(turkey oak)QUCE | 70-80 | 40 | 40 | M | L | N | M(Fr) | S | N |
| *Quercus coccinea* (4-9)(scarlet oak)QUCO | 80-90 | 70 | 40 | M | L | N | M(Fr) | S | N |
| *Quercus falcata* (7-9)(southern red oak)QUFA | 80-90 | 70 | 70 | M | L | N | M(L,Fr) | S | N(bacterial leaf scorch) |
| *Quercus imbricaria* (4-8)(shingle oak)QUIM | 80-90 | 50 | 50 | M | L | N | M(Fr) | S | N(bacterial leaf scorch) |
| *Quercus laurifolia* (6-9)(laurel oak)QULA2 | 80-90 | 40 | 30 | M | L | N | M(Fr) | S | N |
| *Quercus lyrata* (5-9)(overcup oak)QULY | 80-90 | 60 | 60 | M | L | N | M(Fr) | S | N |
| *Quercus macrocarpa* (3-8)(bur oak)QUMA1 | 90-100 | 70 | 70 | M | L | N | M(L,Fr) | S | N |
| *Quercus marilandica* (6-9)(blackjack oak)QUMA2 | 60-70 | 30 | 25 | M | L | N | M(Fr) | S | N |
| *Quercus muehlenbergii* (5-7)(chinkapin oak)QUMU | 80-90 | 60 | 60 | M | L | N | M(Fr) | S | N |
| *Quercus nigra* (6-9)(water oak)QUNI | 50-60 | 50 | 50 | M | M | N | M(Fr,T) | S | N |
| *Quercus pagodifolia* (6-9)(cherrybark oak)QUPA2 | 80-90 | 70 | 70 | M | L | N | M(L,Fr) | S | N(horned oak gall |
| *Quercus palustris* (4-8)(pin oak)QUPA | 60-70 | 60 | 60 | M-F | L | N | M(L,Fr) | S | M(ganoderma, bacterial leaf scorch, chlorosis, horned oak gall) |
| *Quercus phellos* (5-7)(willow oak)QUPH | 80-90 | 50 | 40 | M | L | N | M(L,Fr) | S | N(chlorosis) |
| *Quercus prinus* (5-7)(chestnut oak)QUPR | 80-90 | 60 | 40 | M | L | N | M(Fr) | S | N |
| *Quercus robur* (4-8)(English oak)QURO | 70-80 | 40 | 40 | M | L | N | M(Fr) | S | A(powdery mildew) |
| *Quercus rubra* (3-7)(red oak)QURU | 80-90 | 60 | 60 | M | L | N | M(Fr) | S | N,M(scale, bacterial leaf scorch) |
| *Quercus shumardii* (5-9)(Shumard oak)QUSH | 80-90 | 40 | 40 | M | L | N | M(Fr) | S | N |
| *Quercus stellata* (5-9)(post oak)QUST | 60-70 | 40 | 40 | M | L | N | M(Fr) | S | N,A |
| *Quercus velutina* (3-9)(black oak)QUVE | 80-90 | 50 | 50 | M | L | N | M(Fr) | S | N |
| *Rhus copallina* (4-9)(wing sumac)RHCO | 60-70 | 20 | 20 | F | S | M | N | N | N |
| *Rhus glabra* (3-9)(smooth sumac, flame-leaf s., shining s.)RHGL | 60-70 | 10 | 10 | F | S | M | N | N | N |
| *Rhus typhina* (4-8)(staghorn sumac)RHTY | 60-70 | 20 | 18 | F | S | M-S(suckers) | N | N | N |
| *Robinia pseudoacacia* (4-8)(black locust)ROPS | 20-30 | 40 | 30 | F | M | S | S(L,Fl,FrT,Bark) | M | E(decay, borer, leaf miner) |
| *Salix* x*alba* ‘Tristis’ (2-8)(golden weeping willow)SAAL4 | 40-50 | 50 | 50 | F | S-M | N | S(L,T) | M | M(decay, canker) |
| *Salix matsudana* (5-7)(Hankow willow)SAMA | 30-40 | 40 | 40 | F | S-M | N | S(L,T) | M | M(decay, canker) |
| *Salix nigra* (4-9)(black willow)SANI | 20-30 | 35 | 30 | F | S-M | N | S(L,T) | M | M(decay, canker) |
| *Sassafras albidum* (4-9)(sassafras)SAAL | 60-70 | 30 | 25 | M | S-M | N-S(root damage) | N | M | M(decay, canker, ambrosia beetle) |
| *Sorbus alnifolia* (4-7)(Korean mountainash)SO | 60-70 | 40 | 20 | M | S | N | N | N | N |
| *Sorbus aucuparia* (3-6)(European mountainash)SOAU | 10-20 | 20 | 15 | M | S | N | N | N | E(environmental, fire blight) |
| *Stewartia pseudocamellia* (5-7)(Japanese stewartia)ST15 | 50-60 | 20 | 15 | S | S | N | N | N | N |
| *Styphnolobium japonicum* (4-7)[formerly *Sophora japonica*](Japanese pagodatree)SOJA | 70-80 | 50 | 50 | M-F | M-L | N | M(Fr,T) | M | N(canker) |
| *Styrax japonicus* (5-8)(Japanese snowbell)STJA | 50-60 | 20 | 20 | S | S | N | N | N | N |
| *Syringa pekinensis* (4-7)(Peking lilac)SYSP | 70-80 | 30 | 20 | S | M | N | N | N | N |
| *Syringa reticulata* (4-7)(Japanese tree lilac)SYRE | 70-80 | 30 | 20 | S-M | M | N | N | N | N |
| *Taxodium ascendens* (5-9)(pondcypress)TAAS | 80-90 | 50 | 15 | F | L | N | N | M | N(mites, Japanese beetle) |
| *Taxodium distichum* (4-11)(baldcypress)TADI | 80-90 | 50 | 20 | F | L | N | N | M | N(mites, Japanese beetle) |
| *Taxus baccata* (4-6)(English yew)TABA | 60-70 | 15 | 15 | M | M-L | N | N | M | N(environmental) |
| *Taxus cuspidata* (4-7)(Japanese yew)TACU | 60-70 | 10 | 10 | M | M-L | N | N | N | N(environmental) |
| *Tetradium daniellii* (5-8)(Korean evodia) | 60-70 | 25 | 25 | M | M | M | M(Fr,T) | M | N |
| *Thuja occidentalis* (3-7)(American arborvitae)THOC | 50-60 | 30 | 10 | F | M | N | N | N | A(canker, decay, bagworm, mites) |
| *Thuja plicata* (5-7)(western arborvitae)THPL | 80-90 | 40 | 15 | F | M | N | N | N | A(canker, decay, bagworm, mites) |
| *Tilia americana* (3-8)(American linden, basswood)TIAM | 60-70 | 60 | 35 | M | L | N | M(L,Fr,T) | M | M(decay, Japanese beetle) |
| *Tilia cordata* (3-7)(European littleleaf linden)TICO | 80-90 | 60 | 35 | M | L | N | M(L,Fr,T) | M | M(decay, Japanese beetle) |
| *Tilia* x*euchlora* (3-7)(Crimean linden)TIEU2 | 80-90 | 40 | 20 | M | L | N | M(L,Fr,T) | M | M(decay, Japanese beetle) |
| *Tilia heterophylla* (5-9)(white linden)TIHE | 60-70 | 60 | 35 | M | L | N | M(L,Fr,T) | M | M(decay, Japanese beetle) |
| *Tilia mongolica* (3-6)(Mongolian linden)TI | 60-70 | 30 | 25 | M | L | N | M(L,Fr,T) | M | M(decay, Japanese beetle) |
| *Tilia petiolaris* (5-7)(pendent silver linden)TIPE | 60-70 | 70 | 35 | M | L | N | M(L,Fr,T) | M | M(decay, Japanese beetle) |
| *Tilia platyphyllos* (4-6)(largeleaf linden)TIPL | 60-70 | 60 | 45 | M | L | N | M(L,Fr,T) | M | M(decay, Japanese beetle) |
| *Tilia tomentosa* (4-7)(silver linden)TITO | 80-90 | 50 | 30 | M | L | N | M(L,Fr,T) | M | M(decay, Japanese beetle) |
| *Tsuga canadensis* (3-7)(Canadian hemlock, untreated for adelgid)TSCA | 20-30 | 40 | 25 | F | S | N | N | N | E(environmental, wooly adelgid) |
| *Tsuga canadensis* (3-7)(Canadian hemlock, treated for adelgid)TSCA | 70-80 | 60 | 30 | F | S-L | N | N | N | N(environmental) |
| *Tsuga caroliniana* (4-7)(Carolina hemlock, untreated for adelgid)TSCA2 | 20-30 | 40 | 20 | F | S | N | N | N | E(wooly adelgid) |
| *Tsuga caroliniana* (4-7)(Carolina hemlock, treated for adelgid)TSCA2 | 60-70 | 40 | 20 | F | L | N | N | N | N,M(environmental) |
| *Ulmus alata* (6-9)(winged elm)ULAL | 50-60 | 30 | 25 | M | M | M | M(Fr) | M | A(leaf beetle) |
| *Ulmus americana* (3-9)(American elm, not disease resistant)ULAM | 30-40 | 60 | 40 | F | S-M | M | M(Fr) | M | M, E(Dutch elm disease, leaf beetle, wetwood) |
| *Ulmus americana* (3-9)(American elm, disease resistant hybrid)ULAM | 60-70 | 60 | 40 | F | M-L | M | M(Fr) | M | A(leaf beetle, wetwood) |
| *Ulmus carpinifolia* [*U. minor*] (5-7)(smoothleaf elm)ULPR | 50-60 | 60 | 50 | M | M | M | M(Fr) | M | A(leaf beetle, wetwood) |
| *Ulmus glabra* (4-6)(scotch elm)ULGL | 50-60 | 60 | 45 | M | M | M | M(Fr) | M | A(leaf beetle, wetwood) |
| *Ulmus parvifolia* (5-9)(Chinese elm, lacebark elm)ULPA | 70-80 suggested change to 60-70 | 40 | 40 | F | M | M-S | M(Fr.T) | M | A(leaf beetle, wetwood) |
| *Ulmus procera* (4-6)(English elm)ULPR | 60-70 | 60 | 60 | M | M | M | M(Fr) | M | A(leaf beetle, wetwood) |
| *Ulmus pumila* (4-9)(Siberian elm)ULPU | 10-20 | 50 | 40 | F | M | M-S | M(L,Fr,T) | M | A(leaf beetle, wetwood) |
| *Ulmus rubra* (3-9)(slippery elm)ULRU | 60-70 | 40 | 30 | F | L | M | M(Fr) | M | A(leaf beetle, wetwood) |
| *Viburnum prunifolium* (3-9)(blackhaw)VIPR | 70-80 | 12 | 8 | S | M | N | N | N | N |
| *Viburnum rufidulum* (5-9)(southern blackhaw)VIRU | 70-80 | 15 | 10 | S | M | N | N | N | N |
| *Zelkova serrata* (5-8)(Japanese zelkova)ZESE | 90-100 | 50 | 45 | F | L | N | N | M | N |
| *Ziziphus jujuba* [*Z. zizyphus*] (6-9)(common jujube, Chinese date)ZIZI | 60-70 | 25 | 10 | M | M | N | M(Fr) | N | N |

(1) Approved by Kentucky Arborists’ Association (Kentucky Chapter, International Society of Arboriculture) Board of Directors on 18 July 2017. Revised and approved on XXXXXXXXX. This species rating list is intended as a guide and not a standard. It was developed by experienced green industry professionals based on:

1. **Climate adaptability: b) Growth Characteristics**: **c) Soil adaptability: d) Resistance/tolerance to:**

• cold hardiness • tolerance (different sites) • structure & texture • disease

• frost tolerance • vigor • drainage • insect

• drought tolerance • structural strength • moisture (+ or -) • air pollution

• storm (ice, snow, wind) • aesthetics • pH (acid/alkaline)

 • life expectancy • nutrient (+ or -)

 • pruning req.

• invasive

While this guide is intended for use in Kentucky, it may be used without permission in other areas crediting data as having been obtained from the ***Guide to the Rating of Tree Species in Kentucky***. The copyright is held by the Regional Plant Appraisal Committee of the Kentucky Arborists’ Association (Kentucky Chapter of ISA). The intent of this publication is that it will be revised approximately every five years or as deemed necessary by the Kentucky Arborists’ Association Board of Directors or the Council for Tree and Landscape Appraisers (CTLA).

This guide was produced based on observations of green industry professionals who served on the Kentucky Regional Plant Appraisal Committee. Climate and cultural conditions within the Commonwealth of Kentucky are highly variable and influenced by latitude, longitude, elevation, atypical extremes in weather, significant weather events, microclimates, and cultural influences. Plant performance (growth rates and growth characteristics) in landscapes is dictated by the plant’s pre-determined genetic characteristics unique to that species and is often highly variable between individuals of the same species. Longevity, performance, and failure potential are highly variable and influenced by the interaction between genetics, climate, cultural conditions, water relations, soil type, soil volume, and biotic problems (insects and diseases).

This information is intended as a guide for arborists, plant appraisers, and others working with landscapes. It is not intended as and should not be considered as a guarantee of plant performance or safety. Comments on this manual should be directed to the corresponding author, Dr. William M. Fountain, University of Kentucky, Professor of Arboriculture and Landscape Management (Bill.Fountain@uky.edu).

(2) **Size:** All measurements for height and crown spread are in feet. The height and crown spread are considered the median (midpoint) for the species at maturity that are on an optimum growing sites in the urban environment. Cultivars are asexually propagated individuals of a species that are often selected for differences in height or spread. This data does not represent the maximum genetic potential of the species or the largest individual in the commonwealth. Sizes are based on observations by the committee and collaborated with information from *Manual of Woody Landscape Plants* (5th ed.) by Michael A. Dirr.

**Committee:** William Fountain, chair Winston Dunwell Laura Lyon

 Julie Beale Steve Foltz Jonathan Perkins

Stacy Borden Kelly Jackson Kris Stone

Paul Cappiello Mike Klahr Lee Townsend

(3) **Growth Rate:** S=Slow (4 inches or less); M=Moderate (6 to 8 inches); F=Fast (12 inches or more) of shoot elongation per year after establishment. The normal rate of growth for an individual is site dependent and will be faster in juvenility than old age.

(4) **Lifespan:** S=Short-lived (10-20 years or less); M=Moderate (30-50 years); L=Long-lived (60 years or longer). Longevity assumes optimum growing conditions. Short lifespans may be genetic or the result of common biotic or abiotic factors.

(5) **Invasive / weedy potential:** N=Not known to be invasive; M=Moderately invasive; S=Significant or potentially significant potential to be invasive or weedy. Invasive references non-natives, weedy references species native to eastern North America.

(6) **Litter:** N=Not serious; M=Moderate; S=Significant (Type: L=leaf; Fl=flower; Fr=fruit, T=twigs or branches). Leaf drop in the fall and shedding of other plant parts (flowers, fruit, etc.) is considered normal and is not cited except where the size or abundance is significant as compared to other species.

**(7) Potential to displace pavement** (assumes tree trunk was installed within 3 feet or less of a properly constructed sidewalk and that the soil in the planting hole and under the sidewalk is not limited or compacted): N=None observed or rare; M=Moderate; S=Significant

(8) **Biotic (insect &/or disease) and Abiotic (environmental, cultural) problems:** N=None common or serious; A=Aesthetic problems only (not life-threatening except on suboptimum sites or in conjunction with other stressing agents); M=Moderate, (usually not life-threatening); E=Extreme (life-threatening). Some of the significant problems are listed under select species. “Environmental” refers to extremes of temperature, soil moisture, humidity, light, etc. that are consistently or often out of the optimum range for satisfactory performance in Kentucky landscapes. The accumulation of minor stressing agents can result in life-limiting conditions for an individual plant.

Draft 2.0 (3 November 2018)

**Guide to Valuation of Tree Species in Kentucky by Percentage Class**

 The commonwealth of Kentucky is one of the most botanically and climatologically diverse regions in North America. The elevation ranges from 360 feet above sea level in the southwest to 4,145 feet at the summit of Black Mountain in the Appalachian Mountains. The soils and hydrology are as diverse as the elevation. This can change in a short distance as you move out of the floodplains and through valleys and over hills. While this increases the natural botanical diversity, it makes it difficult to develop a list of species adapted throughout the urban and rural areas of the commonwealth.

It is imperative that a thorough site assessment be conducted (www2.ca.uky.edu/agcomm/pubs/ID/ID244/ID244.pdf) before you begin planting. This will help to ensure that the cultural requirements for species being considered are matched to the cultural conditions on the site. A site evaluation should almost always include a percolation test (www2.ca.uky.edu/agcomm/pubs/ID/ID237/ID237.pdf) to ensure that the soil will drain sufficiently for the type of plants you are considering for your landscape.

The following list of tree species have been evaluated by a team of green industry professionals based on their climate adaptability, growth characteristics, soil adaptability, and tolerance for biotic (disease and insect) and abiotic (cultural and climate) problems. No nursery will carry all of these different types of trees but most nurseries will be glad to help you locate that special plant for your landscape. The list also does not include the mature height. This can vary with significantly with the cultivar carried by the nursery.

This ranking is divided into nine groups ranging from 10-20% to 90-100%. Avoid the temptation to select only species from the highest ranked group. There are no perfect trees or ones that are adapted to all cultural conditions and climates. Species listed in the 90-100% group may not be the most tolerant of your site or aesthetic needs in the design. Also, a landscape with a rich diversity of species is generally a healthier landscape. You can learn more about why species diversity is important in your landscape and community by consulting www2.ca.uky.edu/agcomm/pubs/ID/ID241/ID241.pdf.

Just as you should not select species only from the highest ranked group, species in the 10-20% and 20-30% group are either invasive or intolerant of our cultural conditions. Avoid these plants even though they may be sold in some nurseries. Likewise, species in the 30-40% and 40-50% may also have cultural, disease, or insect problems that limit their usefulness and increase your frustrations. Gardening should be a pleasurable learning opportunity and not a series of frustrations. Remember, no species of tree or shrub is adapted to all cultural environments and mistakes are just an opportunity to learn about a new plant. Landscapes in urban areas are almost always disturbed from their native state and may require modification in order to grow ornamental specimens.

**10-20% - Species of trees that should be avoided in home landscapes**

*Abies balsamea* (balsam fir)

*Ailanthus altissima* (tree of heaven)

*Albizia julibrissin* (mimosa)

*Caragana arborescens* (Siberian peashrub)

x*Cupressocyparis leylandii* (Leyland cypress)

*Elaeagnus angustifolia* (Russian olive)

*Fraxinus americana* (white ash, untreated for EAB)

*Fraxinus excelsior* (European ash, untreated for EAB)

*Fraxinus nigra* (black ash, untreated for EAB)

*Fraxinus pennsylvanica* (green ash, untreated for EAB)

*Lonicera maackii* (Amur bush honeysuckle)

*Lonicera tatarica* (Tatarian bush honeysuckle)

*Morus alba* (white mulberry, female)

*Populus nigra* ‘Italica’ (Lombardy poplar)

*Pyrus calleryana* (Callery pear)

*Sorbus aucuparia* (European mountainash)

*Ulmus pumila* (Siberian elm)

**20-30% - Species of trees that should be avoided in most home landscapes**

*Abies fraseri* (Fraser fir)

*Acer negundo* (boxelder)

*Acer pensylvanicum* (striped maple)

*Acer spicatum* (mountain maple)

*Acer tegmentosum* (Manchustriped maple)

*Betula papyrifera* (paper birch)

*Euonymus alatus* (burningbush)

*Euonymus bungeanus* (winterberry euonymus)

*Euonymus europaeus* (European spindletree)

*Fraxinus excelsior* (European ash, treated for EAB)

*Fraxinus nigra* (black ash, treated for EAB)

*Fraxinus quadrangulata* (blue ash, untreated for EAB) – does not seem to be as susceptible to EAB as other Fraxinus spp. Should this be moved to 40-50%?

*Gleditsia aquatica* (water locust)

*Gleditsia triacanthos* (thorny honeylocust)

*Hibiscus syriacus* (rose of Sharon, non-cultivar)

*Laburnum watereri* (golden chaintree)

*Lagerstroemia indica* (common crapemyrtle) – This is for the tree-form. Though winters are currently warmer, there is still the potential to be damaged or killed to the ground. Should this be moved to a higher ranking, perhaps 30-40% outside western KY & 40-50% (or higher) in western KY?

*Malus pumila* (apple) – change suggested from 60-70%

*Morus rubra* (red mulberry)

*Paulownia tomentosa* (royal paulownia, princesstree)

Picea pungens (Colorado spruce) in western Kentucky

*Robinia pseudoacacia* (black locust)

*Salix nigra* (black willow)

*Tsuga canadensis* (Canadian hemlock, untreated for adelgid)

*Tsuga caroliniana* (Carolina hemlock, untreated for adelgid)

**30-40% - Problematic species that are frequently short lived**

*Abies procera* (noble fir)

*Acer platanoides* (Norway maple)

*Acer pseudoplatanus* (sycamore maple)

*Betula platyphylla* (Japanese white birch)

*Betula populifolia* (gray birch) – change suggested from 50-60%

*Cedrus libani deodara* (deodar cedar)

*Chamaecyparis lawsoniana* (Lawson falsecypress)

*Juniperus communis* (common juniper)

*Juniperus scopulorum* (Rocky Mountain juniper)

*Lagerstroemia fauriei* (Japanese crapemyrtle) – should this be 40-50% in western KY? This species is a slightly hardier than L. indica and has more mildew resistance.

*Larix laricina* (American larch)

*Morus alba* (white mulberry, male)

*Picea pungens* var. *glauca* (blue Colorado spruce) – in western KY

*Pinus nigra* (Austrian pine) – Should this be downgraded to 20-30%?

*Populus alba* (white poplar)

*Populus deltoides* (eastern cottonwood)

*Prunus americana* (wild plum)

*Prunus armeniaca* (apricot)

*Prunus cerasifera* (purpleleaf plum)

*Prunus serotina* (black cherry)

*Salix matsudana* (Hankow willow)

*Ulmus americana* (American elm, not disease resistant)

**40-50%**

*Acer japonicum* (fullmoon maple) – change suggested from 60-70%

*Alnus glutinosa* (European black alder)

*Betula maximowicziana* (monarch birch)

*Carya aquatica* (water hickory, bitter pecan)

*Carya pallida* (sand hickory)

*Castanea dentata* (American chestnut; blight resistant hyb.)

*Castanea mollissima* (Chinese chestnut)

*Corylus maxima* (giant filbert)

*Franklinia alatamaha* (Franklin tree) – change suggested to move this to the 60-70% group. I disagree as it is difficult provide the correct cultural (soil) conditions, needs shade and is not long-lived (beautiful and interesting history are not cultural factors).

*Fraxinus pennsylvanica* (green ash, treated for EAB)

*Ginkgo biloba* (ginkgo, female)

*Maclura pomifera* (Osage orange, female or unnamed selection) – change suggested from 60-70%

*Pinus banksiana* (jack pine)

*Pinus peuce* (Macedonian pine)

*Pinus ponderosa* (ponderosa pine)

*Pinus rigida* (pitch pine)

Pinus strobus (white pine) in western Kentucky

*Pinus sylvestris* (Scots pine, scotch pine)

*Pinus thunbergii* (Japanese black pine)

*Prunus besseyi* (sand cherry)

*Prunus virginiana* (chokecherry) – change suggested from 60-70%

*Salix* x*alba* ‘Tristis’ (golden weeping willow)

**50-60%**

*Acer tataricum* (Tatarian maple)

*Carya glabra* (pignut)

*Chamaecyparis nootkatensis* (Alaska cedar)

*Chamaecyparis obtusa* (hinoki falsecypress)

*Chamaecyparis pisifera* (sawara falsecypress)

*Corylus americana* (American filbert)

*Corylus avellana* ‘Contorta’ (contorted filbert, Harry Lauder’s walking stick)

*Cotinus coggygria* (smoketree)

*Crataegus crus-galli* (cockspur hawthorn)

*Heptacodium miconioides* (seven-son flower)

*Ilex pedunculosa* (longstalk holly)

*Ilex serrata* (Japanese winterberry)

*Juglans cinerea* (butternut)

*Juglans nigra* (black walnut)

*Juglans regia* (English walnut)

*Malus* sp. (crabapple) – change suggested from 60-70%

*Picea rubens* (red spruce)

*Pinus echinata* (shortleaf pine)

*Pinus mugo* (Swiss mountain pine)

*Pinus resinosa* (red pine)

*Pinus taeda* (loblolly pine) – outside western KY

*Pinus wallichiana* (Himalayan pine)

*Platycladus orientalis* (Oriental arborvitae)

Pseudotsuga menziesii (Douglas fir) in western Kentucky

*Quercus nigra* (water oak)

*Stewartia pseudocamellia* (Japanese stewartia)

*Styrax japonicus* (Japanese snowbell)

*Thuja occidentalis* (American arborvitae)

*Ulmus alata* (winged elm)

*Ulmus carpinifolia* [was *U. minor*] (smoothleaf elm)

*Ulmus glabra* (scotch elm)

**60-70%**

*Abies concolor* (white fir)

*Abies nordmanniana* (Nordmann fir)

*Acer diabolicum* (devil’s maple) – change suggested from 30-40%

*Acer maximowiczianum* (nikko maple)

*Acer palmatum* (Japanese maple)

*Acer rubrum* (red maple, seedling forms)

*Acer saccharinum* (silver maple, water maple)

*Acer tataricum ginnala* (Amur maple)

*Aesculus* x*carnea* (red horsechestnut)

*Aesculus flava* (yellow buckeye)

*Aesculus glabra* (Ohio buckeye)

*Aesculus hippocastanum* (common horsechestnut)

*Aesculus pavia* (red buckeye)

*Amelanchier arborea* (downy serviceberry)

*Amelanchier canadensis* (common serviceberry)

*Aralia elata* (Japanese angelica)

*Aralia spinosa* (devil’s walkingstick)

*Betula lenta* (sweet birch, black birch)

*Betula lutea* (yellow birch)

*Betula nigra* (river birch) – change suggested from 70-80%

*Carya cordiformis* (bitternut, pignut)

*Carya illinoinensis* (pecan)

*Carya tomentosa* (mockernut hickory)

*Catalpa bignonioides* (common catalpa)

*Catalpa speciosa* (northern catalpa)

*Cedrus libani atlantica* (Atlas cedar)

*Celtis occidentalis* (common hackberry)

*Cercis canadensis* (eastern redbud)

*Cornus alternifolia* (pagoda dogwood)

*Cornus amomum* (silky dogwood)

*Cornus florida* (flowering dogwood)

*Cornus kousa* (kousa dogwood)

*Cornus racemosa* (gray dogwood)

*Cotinus obovatus* (American smoketree)

*Crataegus* x*lavalleei* (lavalle hawthorn)

*Crataegus phaenopyrum* (Washington hawthorn)

*Crataegus viridis* ‘Winter King’ (winter king hawthorn)

*Diospyros virginiana* (persimmon)

*Fraxinus americana* (white ash, treated for EAB)

*Fraxinus quadrangulata* (blue ash, treated for EAB)

*Gleditsia triacanthos inermis* (thornless honeylocust)

*Hibiscus syriacus* (rose of Sharon, named cultivars)

*Larix decidua* (European larch)

*Larix kaempferi* (Japanese larch)

*Magnolia fraseri* (Fraser magnolia)

*Magnolia grandiflora* (southern magnolia, outside western KY)

*Magnolia macrophylla* (bigleaf magnolia)

*Magnolia tripetala* (umbrella magnolia)

*Oxydendrum arboreum* (sourwood)

*Picea engelmannii* (Engelmann spruce)

*Picea glauca* (white spruce)

*Pinus strobus* (eastern white pine) – outside western Kentucky

*Pinus virginiana* (Virginia pine)

*Pistacia chinensis* (Chinese pistache)

*Prunus* x ‘Hally Jolivette’ (Hally Jolivette cherry)

*Prunus sargentii* (Sargent cherry)

*Prunus serrulata* (Japanese flowering cherry)

*Prunus subhirtella* (Japanese weeping cherry)

*Prunus* x*yedoensis* (Yoshino cherry)

*Pseudotsuga menziesii* (Douglas fir)

*Quercus marilandica* (blackjack oak)

*Quercus palustris* (pin oak)

*Quercus stellata* (post oak)

*Rhus copallina* (wing sumac)

*Rhus glabra* (smooth sumac, flame-leaf sumac, shining sumac)

*Rhus typhina* (staghorn sumac)

*Sassafras albidum* (sassafras)

*Sorbus alnifolia* (Korean mountainash)

*Taxus baccata* (English yew)

*Taxus cuspidata* (Japanese yew)

*Tetradium daniellii* [was *Evodia tetradium*] (Korean evodia)

*Tilia americana* (American linden, basswood)

*Tilia heterophylla* (white linden)

*Tilia mongolica* (Mongolian linden)

*Tilia petiolaris* (pendent silver linden)

*Tilia platyphyllos* (largeleaf linden)

*Ulmus americana* (American elm, disease resistant hybrid)

*Ulmus procera* (English elm)

*Ulmus rubra* (slippery elm)

*Ziziphus jujuba* [*Z. zizyphus*] (common jujube, Chinese date)

**70-80%**

*Abies cilicica* (Cilician fir)

*Acer buergerianum* (trident maple)

*Acer griseum* x *maximowicziana* (Girard maple)

*Acer rubrum* (red maple, improved cultivars)

*Acer saccharum* (sugar maple)

*Acer saccharum nigrum* (black maple)

*Amelanchier* x*grandiflora* (apple serviceberry)

*Amelanchier laevis* (Allegheny serviceberry)

*Asimina triloba* (pawpaw)

*Carpinus betulus* (European hornbeam)

*Carpinus caroliniana* (American hornbeam)

*Carpinus cordata* (heartleaf hornbeam)

*Carpinus japonica* (Japanese hornbeam)

*Carya laciniosa* (shellbark hickory)

*Carya ovata* (shagbark hickory)

*Cedrus libani stenocoma* (hardy cedar of Lebanon)

*Celtis laevigata* (sugar hackberry)

*Chionanthus retusus* (Chinese fringetree)

*Chionanthus virginicus* (white fringetree)

*Cladrastis kentukea* (Kentucky yellowwood)

*Corylus colurna* (Turkish filbert)

*Halesia tetraptera* (silverbell)

*Hamamelis mollis* (Chinese witchhazel)

*Hamamelis virginiana* (common witchhazel)

*Hydrangea paniculata* (peegee hydrangea)

*Ilex opaca* (American holly)

*Koelreuteria paniculata* (golden raintree)

*Liquidambar styraciflua* (sweetgum)

*Liriodendron tulipifera* (tulip poplar)

*Magnolia* sp. (magnolia, named cultivar or hybrid)

*Magnolia acuminata* (cucumber magnolia)

*Magnolia grandiflora* (southern magnolia, in western KY)

*Magnolia heptapeta* (Yulan magnolia)

*Magnolia liliiflora* (lily magnolia)

*Magnolia* x*soulangiana* (saucer magnolia)

*Magnolia stellata* (star magnolia)

*Malus* sp. (crabapple, improved cultivars)

*Ostrya carpinifolia* (European hophornbeam)

*Parrotia persica* (Persian parrotia)

*Phellodendron amurense* (Amur corktree)

*Picea omorika* (Serbian spruce)

*Picea pungens* (Colorado spruce) – outside western KY

*Pinus cembra* (Swiss stone pine)

*Pinus densiflora* (Japanese red pine)

*Pinus flexilis* (limber pine)

*Pinus koraiensis* (Korean pine)

*Pinus parviflora* (Japanese white pine)

*Pinus taeda* (loblolly pine) – in western KY

*Platanus* x*acerifolia* (London planetree)

*Platanus occidentalis* (eastern sycamore)

*Pseudolarix kaempferi* (golden larch)

*Quercus cerris* (turkey oak)

*Quercus robur* (English oak)

*Styphnolobium japonicum* [formerly *Sophora japonica*] (Japanese pagodatree)

*Syringa pekinensis* (Peking lilac)

*Syringa reticulata* (Japanese tree lilac)

*Tsuga canadensis* (Canadian hemlock, treated for adelgid)

*Tsuga caroliniana* (Carolina hemlock, treated for adelgid)

*Ulmus parvifolia* (Chinese elm, lacebark elm)

*Viburnum prunifolium* (blackhaw)

*Viburnum rufidulum* (southern blackhaw)

**80-90%**

*Acer campestre* (hedge maple)

*Acer griseum* (paperbark maple)

*Acer miyabei* (miyabe maple)

*Acer truncatum* (shantung maple)

*Aesculus parviflora* (bottlebrush buckeye)

*Cercidiphyllum japonicum* (katsuratree)

*Cornus mas* (cornelian cherry dogwood)

*Cornus officinalis* (Japanese cornelian cherry dogwood)

*Eucommia ulmoides* (hardy rubbertree)

*Fagus grandifolia* (American beech)

*Fagus sylvatica* (European beech)

*Gymnocladus dioica* (Kentucky coffeetree, female)

*Ilex decidua* (possumhaw)

*Juniperus chinensis* (Chinese juniper)

*Juniperus virginiana* (eastern redcedar)

*Maackia amurensis* (Amur maackia)

*Magnolia* x*loebneri* (Loebner magnolia)

*Magnolia virginiana* (sweetbay magnolia)

*Magnolia virginiana australis* (sweetbay magnolia, southern form)

*Metasequoia glyptostroboides* (dawn redwood)

*Nyssa aquatica* (water blackgum)

*Ostrya virginiana* (hophornbeam)

*Picea abies* (Norway spruce) – suggestion to downgrade to 70-80% and 60-70% (in western KY) due to diseases, mites, warming climate, etc. It is certainly no longer considered relatively problem free.

*Picea orientalis* (oriental spruce)

*Pinus bungeana* (lacebark pine)

*Quercus acutissima* (sawtooth oak)

*Quercus coccinea* (scarlet oak)

*Quercus falcata* (southern red oak)

*Quercus imbricaria* (shingle oak)

*Quercus laurifolia* (laurel oak)

*Quercus lyrata* (overcup oak)

*Quercus muehlenbergii* (chinkapin oak)

*Quercus pagodifolia* (cherrybark oak)

*Quercus phellos* (willow oak)

*Quercus prinus* (chestnut oak)

*Quercus rubra* (red oak)

*Quercus shumardii* (Shumard oak)

*Quercus velutina* (black oak)

*Taxodium ascendens* (pondcypress)

*Taxodium distichum* (baldcypress)

*Thuja plicata* (western arborvitae)

*Tilia cordata* (European littleleaf linden)

*Tilia* x*euchlora* (Crimean linden)

*Tilia tomentosa* (silver linden)

**90-100%**

*Ginkgo biloba* (ginkgo, male)

*Gymnocladus dioica* (Kentucky coffeetree, male)

*Maclura pomifera* (Osage orange, male)

*Nyssa sylvatica* (blackgum)

*Quercus alba* (white oak)

*Quercus bicolor* (swamp white oak)

*Quercus macrocarpa* (bur oak)

*Zelkova serrata* (Japanese zelkova)

**Resources:**

Anon. *Guide for Plant Appraisal* 10th ed. International Society of Arboriculture © 2018

Anon. US Forest Service Species List and Species Code (accessed 26 August 2018) https://www.nrs.fs.fed.us/tools/ufore/local-resources/downloads/PDF\_UDORE\_SPECIES\_LIST.pdf

Dirr, Michael A. Manual of Woody Landscape Plants