Real Earth Design

Ecological Patterning and Permaculture

RAIN AND FOREST GARDEN PLANT MATRIX - ROCKY MOUNTAIN REGION, USA

This list has been compiled by Jason Gerhardt based on over a decade of species trials, observations, and tracking in the Rocky Mountain region. His experience covers a wide expanse from Northern New Mexico to the Central Arizona Highlands to the Colorado Plateau in Utah to the Front Range of Colorado. With a Southwestern focus this list will also prove useful in the Northern Rockies into Canada, extending into the Basin and Range ecosystems of the Intermountain West, well into the High Plains, and beyond.

There are many other useful species that should be trialed for this region. This chart is composed primarily of what the author has experienced to succeed repeatedly in rain garden settings without additional irrigation post-establishment, and with a focus on food production and multifunctionality. All species are perennial, with a few reseeding annuals.

The author has personally interacted with over 95% of the species listed through direct trials, wildland observations, and touring gardens. A forth-coming article will document the authors processes and practices for successful rain garden food forest establishment in the very challenging climates of the high elevation arid Western United States.

How to use this chart: Most importantly, the Rain Garden Zone column is where users can understand the water needs and placement requirements of each plant. “Top” is furthest from the water flow in both elevation and distance, indicating strong drought adaptability. “Terrace” indicates plants with some drought adaptability, as well as water lovers that can’t tolerate inundation. “Bottom” indicates plants that can grow in very moist to saturated soils with periods of inundation.

Special thanks to Shannon Brown for all her help with data entry!

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Latin Name	Common Name	USDA Hardiness Zone	Light Condition	Rain Garden Zone	Mature Height	Nitrogen Fixer	Nectary	Pest Repeller (thorny or aromatic)	Native Region	Edible Uses	Other Uses	Special Notes
Canopy Layer (20' or Taller)												
Robinia pseudoacacia	Black Locust	4-8	Full Sun	Top/Terrace	50-75'	✔	✔	✔	Appalachia	Flower clusters raw/battered and fried	Bee Forage, Coppice, Firewood, Lumber	Some animal toxicity has been reported, but observations show animals self-regulate consumption. Further research needed for fodder uses.
Quercus macrocarpa	Bur Oak	2-8	Full Sun	Top/Terrace	50-100'		✔		Central North America	Acorns ground for meal	Bee Forage, Coppice, Firewood, Lumber, Fodder	Wind blown pollen may cause allergies. Cultivars have been selected for sweeter acorns. Excellent wood for gourmet fungi.
Quercus gambelii	Gambel Oak	4-7	Full Sun	Top	15-50'		✔		Western North America	Acorns ground for meal	Bee Forage, Firewood, Fodder	Wind blown pollen may cause allergies. Has been crossed with Bur Oak for bigger, sweeter acorns. Excellent wood for gourmet fungi.
Juglans nigra	Black Walnut	4-7	Full Sun	Terrace	50-100'		✔		Eastern North America	Nut meats	Coppice, Lumber, Fodder	Susceptible to Thousand Canker Disease, which is prevelant in the region. Contains juglone and is allelopathic.

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Carya illinoinensis	Hardy Pecan	5-9	Full Sun	Terrace	50-100'		✔		Southern US	Nut meats	Coppice, Lumber, Fodder	Species has not been observed by author in the region, but could be trialed. Susceptible to Thousand Canker Disease.
Juglans bisbyi	Buartnut	4-7	Full Sun	Terrace	30-60'		✔		Cultivar	Nut meats	Coppice, Lumber, Fodder	Author knows of one mature specimen in the region that bears nuts. Contains juglone and is allelopathic.
Castanea dentata	American Chestnut	4-7	Full Sun	Terrace	50-100'		✔		Eastern North America	Nut meats	Coppice, Lumber, Fodder	Not productive of nuts. Disease prone. Author knows of several 75+ year old specimen in Boulder, CO with high lumber value.
Diospyros virginiana	American Persimmon	5-9	Full Sun	Terrace	20-75'		✔		Southeast US	Fruit	Bee Forage, Fodder	Improved cultivars such as those bred by Elwyn Meader can be found for larger fruit size.
Pinus edulis	Pinyon Pine	4-7	Full Sun	Top	20-50'				Southwest US	Seeds	Fodder	An important ethnobotanical species for the region. Seedset is best in larger plantings due to wind pollination.
Pinus koraiensis	Korean Stone Pine	4-7	Full Sun	Top	30-100'				Asia	Seeds	Fodder	Have only seen these in other regions, but people are planting them in Colorado. Harvesting cones is a messy process.

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Morus alba	White Mulberry	5-8	Full Sun/Part Shade	Terrace	20-50'				Asia	Fruit	Coppice, Fodder, Medicinal	Leaves can be fed to silkworms to make silk. Has high medicinal value. One of the best fodder crops for poultry due to high protein content.
Morus nigra	Black Mulberry	4-8	Full Sun/Part Shade	Terrace	20-50'				Persia	Fruit	Coppice, Fodder	Leaves can be fed to silkworms to make silk. Has high medicinal value. One of the best fodder crops for poultry due to high protein content.
Malus domestica	Apple	4-9	Full Sun	Terrace	20-40'		✔		Central Asia	Fruit	Bee Forage, Fodder	Is highly susceptible to coddling moth East of the Continental Divide. Not to worry, worm riddled fruits are traditionally pressed for cider.
Pyrus communis	Pear	4-8	Full Sun	Terrace	20-40'		✔		Eurasia/North Africa	Fruit	Bee Forage, Fodder	Very susceptible to fireblight, resistant cultivars recommended.
Pyrus pyrifolia	Asian Pear	5-9	Full Sun	Terrace	20-40'		✔		Asia	Fruit	Bee Forage, Fodder	Author has observed 40' specimens on terraces in Arizona canyons. Prefers slightly warmer conditions than European Pear.

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Prunus domestica	Plum	4-8	Full Sun	Terrace	20'		✔		Eurasia	Fruit	Bee Forage, Fodder	One of the most reliable fruits to grow in the region. Experiment with many cultivars, a wide range of fruit uses can be had within the species. Authors favorites are Mt. Royal, Green Gage, and Stanley.
Prunus persica	Peach	5-9	Full Sun	Top/Terrace	15-30'		✔		Asia	Fruit	Bee Forage, Fodder	One of the more drought hardy rose family fruits. Quality varies significantly by variety and region. Blooms very early in spring, needs bloom delaying microclimate.
Asmina triloba	Paw-Paw	5-7	Part Shade/Full Shade	Terrace/Bottom	20-35'				Eastern North America	Fruit (custard like)	Fodder	Not well-trialed in region. Some success has been reported. Authors concern is that leaves are too large for the UV, hail risk, and desiccation common in region.
Prunus armeniaca	Apricot	5-9	Full Sun	Top/Terrace	20-35'		✔		Central Asia	Fruit, Seed kernals	Bee Forage, Fodder	Another of the more drought hardy rose family fruits. Blooms very early in spring, needs bloom delaying microclimate. Seed kernals are highly medicinal.

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Prunus avium	Sweet Cherry	5-9	Full Sun	Terrace	25-35'		✔		Eurasia/North Africa	Fruit	Bee Forage, Lumber, Coppice, Fodder	Blooms very early in spring, needs bloom delaying microclimate. Lumber is of very high value.
Prunus cerasus	Sour Cherry	4-8	Full Sun	Terrace	25-35'		✔		Eurasia	Fruit	Bee Forage, Lumber, Coppice, Fodder	Blooms very early in spring, needs bloom delaying microclimate. Lumber is of very high value.
Alnus oblongifolia	Arizona Alder	6-10	Full Sun/Part Shade	Bottom	50-100'	✔			Southwest US	None known	Lumber, Coppice	Phenomenal tree. Needs cool microclimate in south, warm microclimate in north. Author knows wild patches well integrated with blackberry, miner's lettuce, golden currants, and old orchard fruits.
Alnus incana var. tenuifolia	Grey Alder	2-6	Full Sun/Part Shade	Bottom	40-60'	✔			Northern Rockies	None known	Lumber, Coppice	A good water-loving nitrogen fixing canopy.
Celtis occidentalis	Hackberry	3-7	Full Sun	Terrace	75-100'		✔		Eastern US	Fruit	Bee Forage, Wildlife Habitat, Lumber	A good specimen shade tree. Well-adapted to varying conditions.

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Ziziphus jujuba	Jujube	6-9	Full Sun	Top/Terrace	15'-30'			✔	Asia	Fruit		Very drought hardy fruit tree. Avoids all spring frosts due to June blooming habit. Not fully hardy in all areas.
Xanthoceras sorbifolia	Yellowhorn	5-7	Full Sun	Terrace	18-24'		✔		Asia	Seeds		Grows at Denver Botanic Gardens.
Acer saccharum	Sugar Maple	3-7	Full Sun/Part Shade	Terrace/Bottom	75-100'				Eastern North America	Sap for syrup	Lumber, Coppice, Firewood	Commonly planted high water user. Could be experimented with for sap production. *Acer grandidentatum* is a Southwestern native replacement.
Acer saccharinum	Silver Maple	3-7	Full Sun	Terrace	75-100'				Eastern North America	Sap for syrup	Lumber, Coppice, Firewood	Commonly planted in drier areas. Has weak branch structure, not recommended as a street tree. Could be experimented with for sap production.
Tilia cordata	Linden	4-7	Full Sun/Part Shade	Terrace	30-75'		✔		Eurasia	Leaves, Flowers	Bee Forage, Lumber, Coppice, Firewood	Very good salad tree. Leaves best when young or in spring. Flower clusters make tasty tea with medicinal properties. Phenomenal bee forage for flavorful honey production.

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Cladrastis kentukea	Yellowood	5-8	Full Sun/Part Shade	Terrace	30-50'	✔			Southeast US	None known	Bee Forage, Lumber, Coppice, Firewood	One of the rarest North American trees. Author knows of gorgeous specimen in Boulder, CO. Best of fall foliage. Likely an older form of nitrogen fixer. Fixes N at a low rate. Extremely high lumber value.
Gleditsia triacanthos	Honey Locust	4-9	Full Sun	Terrace	50-75'	✔		✔	Southeast US	Seed pods marginaly edible	Bee Forage, Lumber, Coppice, Fodder	Likely an older form of nitrogen fixer. Fixes N at low rate. Experimentation needed for pod uses. Sweet pod cultivars exist.
Low Tree, Shrub, and Scrub Layer (2-15')												
Caragana aborescens	Siberian Peashrub	2-7	Full Sun	Top/Terrace	8-20'	✔		✔	Siberia	Seeds, Seed pods	Bee Forage, Coppice, Fodder	Drought and cold hardy. Common. Low food value.
Caragana microphylla	Littleleaf Peashrub	2-7	Full Sun	Top	4-6'	✔		✔	Siberia	None worth mentioning	Bee Forage, Fodder	Slow to grow, but very drought hardy. All *Caragana* species should be considered for soil improvement.

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Quercus undulata	Wavy Leaf Oak	5-8	Full Sun	Top	10-15'				Southwest North America	Acorns ground for meal	Fodder	In authors experience this species has sweet acorns that can be eaten out of hand. Many other *Quercus* species native to Southwest US to be considered.
Prunus dulcis	Almond	6-9	Full Sun	Top/Terrace	10-15'		✔		Persia/Asia	Seed kernals	Bee Forage	Prefers warm conditions and blooms early. Due to this, placement is tricky for this species.
Rosa rugosa	Rose	3-8	Full Sun/Part Shade	Terrace	4-6'		✔	✔	Asia	Fruit/Hips for jelly, tea	Bee Forage, Medicinal	Does not seem to do well in alkaline soils, but will grow. Consider cloning native roses with large fruits. High in Vitamin C.
Elaeagnus angustifolia	Russian Olive	3-7	Full Sun/Part Shade	Top	12-20'	✔	✔	✔	Eurasia	Nominal value in fruit for leathers	Bee Forage, Coppice, Firewood	Invasive, but elegant. Author wouldn't recommend planting it, but consider keeping it (since you may have it) as an N-fixing coppice. Flowers are hyper fragrant.
Elaeagnus commutata	Silverberry	2-6	Full Sun/Part Shade	Top	10-12'	✔	✔		Northern North America	Nutrient dense fruit	Bee Forage	Very drought hardy. Northern Rockies native.

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Mespilus germanica	Medlar	5-8	Full Sun	Terrace	10-15'				Eurasia	Nominal value in fruit		Has not been observed to grow in the region by author, but could be a candidate. Some write very positively about this tree, which is why it made this list.
Corylus cornuta	Beaked Hazel	3-7	Full Sun	Terrace	6-12'				Eastern North America	Nuts	Coppice, Fodder, Wildlife Habitat	Eastern deciduous relict species in Colorado. Nuts are hard to come by in the wild. Has been observed to fruit by author. High wildlife competition.
Corylus avellana	Hazelnut	4-7	Full Sun	Terrace	12-25'				Eurasia	Nuts	Coppice, Fodder, Wildlife Habitat	A large trial was set up at Sunrise Ranch in Loveland, CO by the late John Cruickshank in the early 90's. Many cultivars, fruiting is very sporadic and unreliable.
Prunus virginiana	Chokecherry	2-7	Full Sun/Part Shade	Top/Terrace	8-15'		✔		North America	Fruit	Bee Forage, Coppice, Wildlife Habitat	Fruit was traditionaly ground whole with seeds and dried. Toxic cyanide compound in seeds gasses off during drying.
Amelanchier alnifolia	Juneberry	3-7	Full Sun/Part Shade	Terrace	8-15'		✔		Rocky Mountains/North	Fruit	Bee Forage, Wildlife Habitat	One of the best berry crops for the region. High in protein. High ethnobotanical value. Grows easily, and has many ornamental attributes. Blossoms are frost hardy. Many cultivars.

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Amelanchier stolonifera	Running Serviceberry	3-7	Full Sun/Part Shade	Terrace	4-7'		✔		Eastern North America	Fruit	Bee Forage, Wildlife Habitat	Authors favorite fruiting shrub for taste and beauty. A smaller version of *alnifolia* species. 'Regent' is the most common cultivar.
Amelanchier grandiflora	Shadblow Serviceberry	3-7	Full Sun/Part Shade	Terrace	15-30'		✔		Eastern North America	Fruit	Bee Forage, Wildlife Habitat	A tree version of Juneberry. Delicious fruit. High songbird habitat. Year round beauty. 'Autumn Brilliance' is the authors favorite cultivar.
Amelanchier utahensis	Utah Serviceberry	5-8	Full Sun/Part Shade	Terrace	3-5'		✔		Southwest US	Fruit	Bee Forage, Wildlife Habitat	A desert version of the *Amelanchier*. Berry size and flavor is inferior to the others of this genus. Use in areas too hot for the other species.
Cercocarpus ledifolius	Curl-leaf Mountain Mahogany	5-8	Full Sun	Top	6-15'	✔			Western North America	None known		Authors favorite drought hardy nitrogen fixer. Beautiful as a specimen tree.
Cercocarpus montanus	Mountain Mahogany	5-8	Full Sun	Top	6-15'	✔			Western North America	None known		Beautiful native nitroen fixing shrub for dry areas with poor soil. Prefers rocky or sandy soils.

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Prunus insitita	Damson Plum	4-7	Full Sun/Part Shade	Terrace	6-12'		✔		Europe	Fruit	Bee Forage	Low growing plum. Heavily planted among early orchards on Front Range of Colorado. Very productive. Fruit quality not as good as regular plum.
Prunus besseyi	Sand Cherry	4-8	Full Sun	Top/Terrace	2-4'		✔		Central North America	Fruit	Bee Forage	Fairly insipid fruits, but could be prepared with other fruits. Dehyrdated they are delicious, as well as when planted in drier areas.
Robinia neomexicana	New Mexico Locust	5-8	Full Sun	Top/Terrace	6-15'	✔	✔	✔	Southwest North America	Flower clusters raw/battered and fried	Bee Forage, Coppice	Beautiful shruby, pink flowered version of Black Locust.
Amorpha fruiticosa	False Indigo	3-9	Full Sun/Part Shade	Top/Terrace/Bottom	6-15'	✔	✔		North America	None known	Bee Forage, Coppice	The most underutilized native nitrogen fixer. Widely adaptable. Very resilient. Attractive feathery foliage.
Amorpha nana	Fragrant False Indigo	3-6	Full Sun	Top/Terrace	2-4'	✔	✔		Central US	None known	Bee Forage, Coppice	Beautiful little shrub for dry spots. Takes up little space. Highly adapted to drought.
Amorpha canescens	Lead Plant	3-8	Full Sun	Top/Terrace	3'	✔	✔		Central North America	None known	Bee Forage, Coppice	Widely adapted.

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Prunus americana	Wild Plum	3-8	Full Sun	Top Terrace	8-15'		✔		North America	Fruit	Bee Forage, Coppice	Fruit quality is low. Makes a very good rootstock for cultivated stone fruits. Author recommends it for grafting.
Ribes aureum	Golden Currant	4-8	Full Sun/Part Shade	Terrace	3-6'		✔		North America	Fruit	Bee Forage, Coppice	Delicious fruit, easy to propagate via layering. All *Ribes* should be considered due to not sharing diseases with the overwhelmingly planted rose family.
Ribes rubrum	White Currant	4-8	Full Sun/Part Shade	Terrace	3-5'		✔		Europe	Fruit	Bee Forage, Coppice	One of the authors favorite berries for the cooler parts of the region. Excellent flavor. Easy to propagate via layering.
Ribes rubrum	Red Currant	4-8	Full Sun/Part Shade	Terrace	3-5'		✔		Europe	Fruit	Bee Forage, Coppice	Aphids can be a bother in shadier locations. All *Ribes* fruit best in sunnier conditions. Easy to propagate via layering.
Ribes odoratum	Crandall Currant	4-8	Full Sun/Part Shade	Terrace	3-6'		✔		Cultivar	Fruit	Bee Forage, Coppice	The best of the *Ribes* for the region. Large fruit, sweet in flavor. Easy to propagate via layering.
Ribes uva-crispa	Gooseberry	4-6	Full Sun/Part Shade	Terrace	2-5'		✔	✔	Europe/North America	Fruit	Bee Forage, Coppice	An excellent species to include. Delicious fruit. Thorns can be a nuisance, but useful as living fence.

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Ribes nigrum	Black Currant	3-7	Full Sun/Part Shade	Terrace	3-4'		✔		Europe	Fruit	Bee Forage, Coppice	More strongly flavored than the other *Ribes*. Some really like the flavor, others don't.
Sambucus caerulea	Blue Elderberry	3-10	Full Sun/Part Shade	Terrace/Bottom	8-15'		✔		Western North America	Fruit, Flowers	Bee Forage, Coppice, Medicinal	Highly medicinal fruits that are good as jam and wine. Can be mixed with other fruit. Flowers are highly medicinal as well. Widely adapted plant. Attractive.
Sambucus nigra	Black Elderberry	5-8	Full Sun/Part Shade	Terrace	8-20'		✔		Europe/North America	Fruit, Flowers	Bee Forage, Coppice, Medicinal	Highly medicinal fruits that are good as jam and wine. Can be mixed with other fruit. Flowers are highly medicinal as well. Widely adapted plant. Attractive.
Shepherdia argentea	Buffaloberry	3-10	Full Sun	Top/Terrace	5-15'	✔	✔	✔	Northern North America	Nominal value in fruit	Coppice	Drought hardy nitrogen fixer. Grows fast. Author doesn't recommend the quality of fruit in any way. Mildly thorny. Male plants are needed to pollinate female plants.
Cydonia oblonga	Quince	5-9	Full Sun	Terrace	10-20'		✔		Eurasia	Fruit	Bee Forage	Improved cultivars are available. Author has not trialed them enough, so please experiment.

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Prunus tomentosa	Nanking Cherry	3-7	Full Sun	Top/Terrace	5-10'		✔		Asia	Fruit	Bee Forage	Fruit with many uses. First thing to bloom in the spring, needs bloom delaying microclimate. The authors favorite wine is made from this fruit.
Opuntia spp.	Prickly Pear	5-9	Full Sun	Top	2-5'			✔	North America	Pads, Fruit		Various useful *Opuntia* species exist for different climates. All have spines on fruit and pads to some degree. These can be removed by peeling or with fire. Delicious fruit!
Cylindropuntia imbricata	Cholla	5-11	Full Sun	Top	3-8'			✔	Southwest North America	Flower buds		Plant has barbed spines. Useful as a living fence to keep wildlife at bay. Flower buds can be pickled like artichoke hearts.
Yucca baccata	Banana Yucca	5-11	Full Sun	Top	3'			✔	Southwest North America	Flowers, Fruit		Fruits can be processed following enthnobotanical methods. Flowers can be eaten raw and added to salads.
Lonicera caerulea	Honeyberry	3-7	Part Shade	Terrace	3-6'		✔		Eurasia	Fruit		Many cultivars are available. Fruit is sour, but flavorful.

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Hippophae rhamnoides	Sea Buckthorn	3-7	Full Sun/Part Shade	Top/Terrace	8-15'	✔		✔	Eurasia	Fruit	Coppice	Has a very high medicinal value. Male plants are needed to pollinate female plants. Harvesting is difficult.
Lycium pallidum	Wolfberry	6-9	Full Sun	Top	5-10'			✔	Southwest North America	Fruit	Wildlife Habitat	An important ethnobotanical species. Fruit quality is excellent, superior to goji in authors opinion. Difficult to acquire. Likes warmth.
Fallugia paradoxa	Apache Plume	5-10	Full Sun	Top/Terrace	4-6'	✔	✔		Southwest North America	None known	Erosion Control	Valued for erosion control. A non-leguminous nitrogen fixer. Very attractive and useful for dry locations with sandy soil.
Ceanothus velutinus	Mountain Ceanothus	4-7	Full Sun/Part Shade	Top	1'	✔	✔	✔	Rocky Mountains	None known	Medicinal	An excellent erosion control species with multiple functions. One of the best beneficial insect attractors.
Lavendula angustifolia	Lavender	4-9	Full Sun	Top	1'		✔	✔	Europe	Minor uses of leaves	Bee Forage, Medicinal	Beautiful and fragrant! Excellent beneficial insect attractor.
Hyssopus officianalis	Hyssop	4-9	Full Sun	Top	1'		✔	✔	Europe	None known	Bee Forage, Medicinal	Beautiful and fragrant! Excellent beneficial insect attractor.

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Rosmarinus officianalis	Rosemary	6-9	Full Sun	Top	1-3'		✔	✔	Europe	Leaves for flavoring/spice	Bee Forage, Medicinal	Cold-hardy varieties exist. 'Arp' is a common one. Needs warm microclimate in most of the region.
Herbaceous Layer (plants die back to ground each year)												
Symphytum officinale	Russian Comfrey	4-8	Full Sun/Part Shade	Terrace	2-4'		✔		Europe	Leaves (not recommended for food)	Bee Forage, Medicinal	This highly useful mulch plant should be planted wherever it can grow in the region. It's deep tap root is known to accumulate nutrients from deep in the subsoil recycling them through the topsoil. Many medicinal uses. Grows easily.
Symphytum grandiflorum	Dwarf Comfrey	4-8	Full Sun/Part Shade	Terrace	8"-18"		✔		Europe	Leaves (not recommended for food)	Bee Forage, Medicinal	The smaller version of comfrey, this plant grows lower to the ground and makes a riot of flowers for much longer than the bigger version. Spreads by seed and root, which can be minorly bothersome in this region.

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Atriplex hortensis	*Orach	*	Full Sun/Part Shade	Top/Terrace/Bottom	4-6'		✔		Eurasia	Leaves		*A Reseeding annual. A useful spring green before the plant gets over 1'. Beautiful magenta colored cultivars are available.
Baptisia australis	Blue False Indigo	4-8	Full Sun	Top/Terrace	2-4'	✔	✔		Eastern North America	None known	Bee Forage, Medicinal	Gorgeous low maintenance nitrogen fixer. Many different species are available with different flower colors, and heights. Highly recommended!
Asparagus officinalis	Asparagus	2-9	Full Sun	Terrace	3-6'		✔		Eurasia/North Africa	Spring shoots	Bee Forage	The most consumed perennial vegetable. Plant in narrow blocks so harvest is easy. Surprisingly drought hardy.
Medicago sativa	Alfalfa	3-8	Full Sun	Top/Terrace	1-3'	✔	✔		Europe	Minor uses for leaves/flowers	Bee Forage, Medicinal	Deep rooted alfalfa is an excellent soil improver. Breaks up soil compaction. Medicinal uses for leaves and flowers. Excellent beneficial insect attractor.
Solidago spp.	Goldenrod	3-7	Full Sun/Part Shade	Terrace	1-5'		✔		North America	None known	Bee Forage	All of the goldenrods are excellent beneficial insect attractors. Use pletnifully.

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Glycyrrhiza lepidota	American Licorice	3-8	Full Sun/Part Shade	Top/Terrace	1-3'	✔	✔		North America	None known	Medicinal	Mostly used as a soil improver. Medicinal qualities not the same as European licorice. Spreads somewhat uncontrollably.
Agastache foeniculum	Anise Hyssop	3-8	Full Sun/Part Shade	Terrace	2-4'		✔	✔	North America	Leaves in tea and salad	Bee Forage	Licorice flavored leaves. Frank Morton of Wild Garden Seeds has bred an improved variety for salad use. One of the best beneficial insect attractors out there. Song birds relish the seeds. Many other *Agastache* species available.
Psoralea esculenta	Breadroot	4-8	Full Sun	Top	1'	✔			Central North America	Roots used as vegetable or ground for flour	Bee Forage	Breadroot is a significant ethnobotanical plant for the Eastern portions of the Rocky Mountain region. Roots were traditionally dried and braided
Mertensia lanceolata	Rocky Mountain Bluebells	4-6	Part Shade/Full Shade	Terrace/Bottom	1'		✔		Rocky Mountains	Leaves in salads	Bee Forage	Comfrey and Borage relative. Cucumber flavored leaves.
Stachys affinis	Mint Root	4-8	Full Sun	Terrace	6-16"		✔		Asia	Tubers raw or cooked	Bee Forage	Also called Chinese Artichoke and Crosnes. A tasty perennial vegetable that attracts beneficial insects. Surprisingly drought hardy.

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Matricaria chamomilla	*German Chamomile	*	Full Sun	Top/Terrace	1-2'		✔		Europe	Flowers for tea	Bee Forage, Medicinal	*A reseeding annual. Grows quickly in spring, flowering in early summer. Beautiful!
Allium schoenoprasum	Chives	2-10	Full Sun/Part Shade	Terrace	5-20"		✔	✔	North America/Europe	Leaves, Flowers	Bee Forage	A strongly aromatic plant that can repel pests. Beautiful flowers in spring.
Allium tuberosum	Garlic Chives	3-10	Full Sun	Top/Terrace	1-2'		✔	✔	Asia	Leaves, Flowers	Bee Forage	A strongly aromatic plant that can repel pests. Beautiful flowers in Fall. Also called Chinese Leeks, the flavor is closer to leek than garlic. A favorite and must have!
Allium tricoccum	Ramps	4-8	Shade	Terrace	6-12"			✔	Eastern North America	Leaves, Bulbs	Minor Bee Forage, Medicinal	A rare plant in the West, the author has had good success with them in moist shade. A high value plant, with gourmet flavor. Highly sought after.
Aquilegia caerulea	Rocky Mountain Columbine	3-7	Part Shade	Terrace/ Bottom	1-2'		✔		Rocky Mountains	None known	Bee Forage	A classic Rocky Mountain plant that adds a wild touch to the garden. *Aquilegia chrysantha* is a taller yellow flowering species.

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Hemerocallis fulva	Daylily	2-9	Full Sun/Part Shade	Terrace	2-4'		✔		Eurasia	Flowers, Flower buds, Tubers	Bee Forage	A pretty ornamental with some minor edible uses.
Allium cepa proliferum	Walking Onion	4-10	Full Sun/Part Shade	Top/Terrace	2-3'			✔	Eurasia	Leaves, Bulbs		Favorite perennial vegetable! First thing to eat in the spring, last thing to eat in the fall. Amazingly drought hardy. Keeps pests away. A must have!
Allium cepa aggregatum	Potato Onion	5-9	Full Sun	Terrace	2'			✔	Eurasia	Leaves, Bulbs		A perennial onion, much like a shallot. Breeders are working on this to get larger bulbs with great success. Kelly Winterton of Utah sells his breeding stock.
Rumex acetosa	French Sorrel	3-9	Full Sun/Part Shade	Terrace	1-3'		✔		Eurasia	Leaves		A delicious perennial leaf vegetable. Attracts many beneficial insects.
Armoracia rusticana	Horseradish	2-8	Full Sun	Terrace	4'		✔		Eurasia	Roots	Bee Forage, Medicinal	Medicinal roots with strong flavor, used in many foods.
Foeniculum vulgare	Bronze Fennel	4-9	Full Sun	Terrace	4-7'		✔	✔	Eurasia	Leaves, Seeds	Bee Forage	The best beneficial insect attractor in terms of numbers. Astounding! Nice feathery foliage and flavor. Spreads aggressively by seed.

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Allium sativum	*Garlic	4-9	Full Sun	Terrace	1-2'			✔	Eurasia	Bulbs, Leaves	Medicinal	The author plants garlic in his food forests every year to keep deer away. *As a dig and replant perennial, this method works great without taking up space in the vegetable garden.
Lupinus spp.	Lupine	3-9	Full Sun/Part Shade	Top	1-2'	✔	✔		North America	None known	Bee Forage	Virtually everywhere in the Rocky Mountain region has native lupine species. Find them and grow them for nitrogen fixation and aesthetics.
Helianthus tuberosus	Jerusalem Artichoke	2-10	Full sun/Part Shade	Terrace	6-12'		✔		North America	Tubers for cooking	Bee Forage	May not be suitable for rain gardens due to annual deep digging required. Still a useful perennial vegetable in the forest garden. Aggressively spreading, plant cautiously.
Artemisia dracunculus	Tarragon	5-9	Full Sun/Part Shade	Top/Terrace	4'		✔		Eurasia	Leaves for flavoring/spice	Bee Forage	Wild growth habit, tends to fall onto surrounding plants. Give plenty of room. Drought hardy.
Helianthus maximiliani	Maximillian Sunflower	2-8	Full Sun/Part Shade	Top/Terrace	4-10'		✔		Central North America	Young shoots in spring	Bee Forage, Wildlife Habitat	These can be aggressive in wetter areas. Very drought hardy however. The author has not experimented with the edibility of the young shoots.

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Rheum rhabarbarum	Rhubarb	3-8	Full Sun/Part Shade	Terrace	2-4'		✔		Eurasia	Stems before flowering		Stems have been used for thousands of years. Commonly made into preserves or pie. Mix with other fruits and sweetener. Easy to propagate. Blanching pots increase stem length and size significantly in dry areas.
Crambe maritima	Sea Kale	4-8	Full Sun	Top	2-3'		✔		Europe	Flower shoots before blooming/ blanched leaves	Bee Forage	Another author favorite. Flower shoots are like broccolini, but perennial with zero water needed in most areas. Beautiful in bloom, easy to propagate.
Urtica dioica	Stinging Nettle	4-8	Full Sun/Part Shade	Top/Terrace	1-5'		✔	✔	Eurasia/North Africa/North America	Young shoots in spring and fall	Medicinal	Leaves have stinging hairs that cause irritation to the skin. Cook or dehydrate to inactivate. One of the best perennial vegetables for the region. Nutrient dense with high mineral content. Authors favorite use is in quiche. Note Rain Garden Zone suggestion as "Top" to limit its spread.
Myrrhis odorata	Sweet Cicely	3-6	Part Shade/Full Shade	Terrace	1-2'		✔		Europe	Roots	Bee Forage	An excellent insectary plant. Tasty roots in the Fall. Has been reported to spread by seed aggressively, but author has not had that experience in the arid Western US.

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Matteuccia struthiopteris	Ostrich Fern	2-8	Full Shade	Terrace/Bottom	2-6'				North America/Eurasia	Spring shoots known as fiddleheads		The author has been experimenting with this plant far beyond it's native range. In wet, shady areas with high organic matter content, they do well. Still a marginal plant for the region. Prefers a more acid soil than is found in the West.
Levisticum officinale	Lovage	4-7	Full Sun/Part Shade	Terrace	4-8'		✔		Eurasisa	Young shoots in spring	Bee Forage	An excellent insectary and mulch plant.
Sium sisarum	Skirret	5-9	Full Sun/Part Shade	Bottom	2-3'		✔		Asia	Roots	Bee Forage	The author has only limited experience with this plant. Has not eaten roots as the plantings seem to barely survive. Plant very close to water and where digging is acceptable.
Ipomea leptophylla	Bush Morning Glory	4-7	Full Sun	Top	1-3'				Rocky Mountains	Roots		A very difficult plant to establish, but supposedly worth it once it's rooted. Has large fleshy roots. Sweet Potato relative.
Origanum spp.	Oregano	4-8	Full Sun	Top/Terrace	1-2'		✔	✔	Eurasia/North Africa	Leaves for flavoring/spice	Bee Forage, Medicinal	Greek oregano has the best flavor combined with cold hardiness. Excellent insectary.

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Thymus vulgaris	Thyme	4-10	Full Sun	Top/Terrace	6-18"		✔	✔	Eurasia	Leaves for flavoring/spice	Bee Forage, Medicinal	Excellent insectary.
Salvia officinalis	Culinary Sage	4-8	Full Sun	Top/Terrace	2-3'		✔	✔	Eurasia	Leaves for flavoring/spice	Bee Forage	Beautiful contrast in spring with pink/purple flowers and grey green foliage. The author uses the variegated and purple cultivars too.
Heracleum maximum	Cow Parsnip	2-9	Part Shade	Terrace/Bottom	3-8'		✔		North America	Roots	Bee Forage	The author has not experimented with the edibility of the roots. Worth planting for insectary habitat alone. High biomass producer.
Perideridia gairdneri	Yampah	4-7	Full Sun/Part Shade	Top/Terrace	18-36"		✔		Rocky Mountains	Roots	Bee Forage	Difficult to obtain. Wildcraft seed and spread. Important staple food of Ute peoples of Rocky Mountains.
Monarda fistulosa	Bee Balm	4-9	Part Shade	Top/Terrace	3-4'		✔	✔	North America	Flowers, Leaves	Bee Forage, Medicinal	High value flowers when dried for medicine. Beautiful. The author recommends using native varietals instead of cultivars. Major insectary!
Echincaea purpurea	Purple Coneflower	3-8	Full Sun	Terrace	3-4'		✔		Central North America	None known	Bee Forage, Medicinal	A strong and valuable medicinal. Flowers and roots are used. Roots should be harvested every three years.

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Echincaea angustifolia	Narrow-Leaf Echinacea	3-7	Full Sun	Top/Terrace	2-3'		✔		Central North America	None known	Bee Forage, Medicinal	A strong and valuable medicinal. Flowers and roots are used. Roots should be harvested every three years. A more drought hardy Western species.
Echincaea pallida	Pale Purple Coneflower	3-10	Full Sun	Terrace	2-3'		✔		Central North America	None known	Bee Forage, Medicinal	A strong and valuable medicinal. Flowers and roots are used. Roots should be harvested every three years. An attractive Southeatern species.
Gaillardia aristata	Blanet Flower	3-8	Full Sun	Top/Terrace	1'		✔		North America	None known	Bee Forage	A must have in every garden. Aesthetic variation within the species exists. Some are solid gold, others are the characteristic red and gold.
Thelesperma megapotamicum	Hopi Tea Greenthread	5-9	Full Sun	Top/Terrace	1-3'		✔		North America	Flowers for tea	Bee Forage	Wonderful tea plant. Rated as the favorite native tea plant by several Southwestern tribes. The author is at a little bit of a loss on how to get it to grow well beyond the first season.
Melilotus officinalis	*Yellow Sweet Clover	4-9	Full Sun	Terrace	2-3'	✔	✔		Eurasia	None known	Bee Forage, Erosion Control	*Biennial. Superior nitrogen fixer. Beautiful in bloom. The author lets the plant reseed and leaves where desireable.

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Melilotus albus	*White Sweet Clover	4-9	Full Sun	Terrace	4-7'	✔	✔		Eurasia	None known	Bee Forage, Erosion Control	*Biennial. Nitrogen fixing biomass out of this world. Needs lots of room to grow in second year.
Valeriana officinalis	Valerian	4-7	Full Sun/Part Shade	Terrace	3-5'		✔		Eurasia	None known	Bee Forage, Medicinal	A nice insectary. Likes cooler climates.
Tanacetum vulgare	Tansy	3-8	Full Sun	Terrace	3'		✔		Eurasia	None known	Bee Forage	Excellent insectary. Can spread by seed. Supposedly has insecticidal properties.
Allium cernuum	Nodding Onion	4-8	Full Sun/Part Shade	Top/Terrace	1-2'		✔	✔	North America	Leaves and Bulbs	Bee Forage	Lovely understory species. Can use like pearl onions. Ethnobotanical value.
Melissa officinalis	Lemon Balm	5-7	Full Sun/Part Shade	Top/Terrace	1-2'		✔	✔	Eurasia/North Africa	Leaves for salads and tea	Bee Forage, Medicinal	A useful medicinal and insectary plant. Can spread vigourously by seed. Makes an annual weeding chore, but not too bad for the benefits.
Rudbeckia hirta	Black Eyed Susan	3-7	Full Sun	Terrace	2-3'		✔		North America	None known	Bee Forage	Beneficial insect attracting ornamental.

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Rudbeckia laciniata	Cut Leaf Coneflower	3-9	Full Sun/Part Shade	Terrace/Bottom	2-8'		✔		North America	None known	Bee Forage, Medicinal	A water loving version of black eyed susan. Very large plants. Medicinally is an analog for echinacea according to Michael Moore.
Rumex sanguineus	Bloody Dock	5-8	Full Sun	Terrace	1-4'		✔		Cultivar	Leaves for salad		Commonly sold as red veined french sorrel. It is actually a cultivated type of dock.
Pseudocymoptus montanus	Mountain Parsley	4-8	Full Sun	Top/Terrace	6-18"		✔		Rocky Mountains	None known	Bee Forage	Many mountain parsely species exist. This species harbors a tremendous amount of predatory wasps. All *Apiaceae* species are useful for this purpose.
Eriogonum umbellatum	Sulphur Buckwheat	4-8	Full Sun	Top/Terrace	6-12"		✔		Western North America	None known	Bee Forage	One of the best bee forage plants for the region. Highly ornamental too! There are many *Eriogonum* species available for each ecoregion. Find the native species and grow those.
Calochortus nuttallii	Sego Lily	3-7	Full Sun	Terrace	1-2'		✔		Rocky Mountains	Tubers		An other worldly looking flower. High ethnobotanical value. Was an important food source of the Ute peoples. Would be difficult to grow in quantity.

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RAIN AND FOREST GARDEN PLANT MATRIX - ROCKY MOUNTAIN REGION, USA

Latin Name	Common Name	USDA Hardiness Zone	Light Condition	Rain Garden Zone	Mature Height	Nitrogen Fixer	Nectary	Pest Repeller (thorny or aromatic)	Native Region	Edible Uses	Other Uses	Special Notes
Groundcover Layer (plants that hug the ground, growing a carpet, or as close as possible)												
Dalea candida	White Prairie Clover	3-8	Full Sun	Top	1-2'	✔	✔		Central North America	None known	Bee Forage, Erosion Control	An attractive groundcover for pollinators and soil improvement.
Dalea purpurea	Purple Prairie Clover	3-8	Full Sun	Top	1-3'	✔	✔		Central North America	None known	Bee Forage, Erosion Control	An attractive groundcover for pollinators and soil improvement.
Physalis spp.	Ground Cherry	4-9	Full Sun	Top/Terrace	1-3'		✔		North America	Fruit	Erosion Control	There are many ground cherry species, some native, some not. Some are perennial, some are reseeding annual. Delicious fruit! Fruit sold as "Goldenberry" for high prices.
Trifolium repens	White Clover	4-9	Full Sun/Part Shade	Terrace/Bottom	4-10"	✔	✔		Eurasia	Flowers for tea	Bee Forage	Classic Dutch White Clover. Grows in lawns everywhere. The author has had a hard time establishing it through woodchip mulch. Prefers bare soil.

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Trifolium pratense	Red Clover	4-9	Full Sun	Terrace/Bottom	6-16"	✔	✔		Eurasia	Flowers for tea	Bee Forage, Medicinal	The author has had more success with red clover than white through woodchip mulch. Flowers are valuable as medicine. Very pretty!
Lotus corniculatus	Bird's Foot Trefoil	5-8	Full Sun/Part Shade	Top/Terrace/Bottom	18"	✔	✔		Eurasia	None known	Bee Forage	It is very hard to get a full groundcover to establish over an entire forest garden in the arid regions. This species works very well in sandier soils.
Thymus lanuginosus	Woolly Thyme	4-8	Full Sun/Part Shade	Terrace/Bottom	3"				Eurasia	None known	Erosion Control, Living Lawn	Beautiful living lawn! The author uses it in pathways, rock walls, and rock aprons of rain gardens. This varietal doesn't flower profusely like other creeping thymes, but is very hardy.
Mentha piperita	Peppermint	4-10	Full Sun/Part Shade	Top/Terrace	1-2'		✔	✔	Eurasia	Leaves for tea	Bee Forage	As with all mints, be careful where you put it, as you're likely to have it there forever. Chocolate mint is a very nice cultivar! I recommend putting at the "Top" section of rain gardens to limit spreading. Will form complete groundcover.

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Mentha spicata	Spearmint	4-10	Full Sun/Part Shade	Top/Terrace	1-2'		✔	✔	Eurasia	Leaves for tea	Bee Forage	As with all mints, be careful where you put it, as you're likely to have it there forever. Grapefruit mint is a very nice cultivar! I recommend putting at the "Top" section of rain gardens to limit spreading.
Mentha arvensis	Poleo Mint	4-8	Full Sun	Top/Terrace	2-4'		✔	✔	Rocky Mountains	Leaves for tea	Bee Forage, Medicinal	A native mint to the Rocky Mountain West. Less aggressive than the Eurasian types. Attractive flowers!
Sanguisorba minor	Salad Burnett	5	Full Sun/Part Shade	Terrace	1-2'		✔		Eurasia/North Africa	Leaves for salad	Bee Forage, Medicinal	A nice little perennial leaf to add to salads. Cucumber flavored.
Achillea millefolium	Yarrow	3-10	Full Sun/Part Shade	Top/Terrace	2-3'		✔		Eurasia	None known	Bee Forage, Medicinal	The Eurasian Yarrow can spread aggresively by seed and runners. The author prefers the following species for this reason.

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Achillea lanulosa	Western Yarrow	3-10	Full Sun/Part Shade	Top/Terrace	1-2'		✔		North America	None known	Bee Forage, Medicinal	A much preferred yarrow groundcover. This is the yarrow you will find growing in riparian areas all over the arid West. Mild mannered.
Oxalis acetosella	Wood Sorrel	3-10	Part Shade	Terrace	2-6"		✔		Eurasia	Leaves for salad		An aggressive reseeder. Will not form complete groundcover. Weedy.
Fragaria spp.	Strawberry	3-10	Part Shade	Terrace	6-12"		✔		Cultivar	Fruit		Perhaps the quintessential ground cover. If only they would cover the ground and fruit forever! Needs to be thinned as they crowd each other out. Prefers part shade at high elevation.
Fragaria virginiana	Wild Strawberry	4-9	Full Sun/Part Shade	Terrace	4-12"		✔		North America	Fruit		A native version of the cultivated strawberry. Very tasty! Can be safely propagated from the wild.
Rubus pubescens	Dewberry	5-7	Part Shade/Full Shade	Terrace	4-12"		✔		North America	Fruit		Not the best fruit in the world, but an interesting groundcover for wet, cool, shady areas. Eastern deciduous relict species in the canyons of the Front Range of Colorado.

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Crocus sativus	Saffron Crocus	6-10	Full Sun	Terrace	6"		✔		Eurasia	Stigmas as a spice		The worlds most expensive spice! These grow easily. Harvesting the stigmas in any quantity is not easy. Still a fun plant for the garden tour!
Medicago lupulina	Black Medic	4-8	Full Sun	Top	1-2'	✔	✔		Eurasia/North Africa	None known	Erosion Control	A lovely ground cover! Low growing and stays out of the way.
Arnica montanus	Arnica	3-6	Full Sun/Part Shade	Top/Terrace	1-2'		✔		Rocky Mountains	None known	Medicinal	The author has not had success trying to grow this plant, but it forms a solid groundcover in the native habitat. Valuable medicinal species.
Thermopsis montana	Mountain Goldenbanner	4-9	Full Sun	Top/Terrace	1-2'	✔	✔		Rocky Mountains	None known	Bee Forage, Erosion Control	An excellent nitrogen fixing groundcover!

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Thermopsis rhombifolia	Buffalo Bean	4-9	Full Sun/Part Shade	Top/Terrace	1-2'	✔	✔			None known	Bee Forage, Erosion Control	The prairie version of the mountain *Thermopsis*. Forms a full and extensive groundcover. Goregeous in full bloom.
Montia perfoliata	*Miner's Lettuce	*	Part Shade/Full Shade	Terrace	6"		✔		Western North America	Leaves for salad		*A Reseeding annual. An excellent edible ground cover. Needs bare soil to germinate. The author has seen patches in Arizona canyons that fully carpet the ground for hundreds of feet. Good to seed after digging root crops in the forest garden.
Viola canadensis	Violet	4-7	Part Shade/Full Shade	Terrace	6"		✔		North America	Leaves and flowers for salad		One of the most successful wild groundcovers in the authors experience. Large patches in riparian areas in the Front Range of Colorado demonstrate good suitability as a groundcover for that ecoregion.
Oryzopsis hymenoides	Indian Ricegrass	5-8	Full Sun	Top/Terrace	1-2'				Western North America	Seeds	Erosion Control	High ethnobotanical value! Forms full groundcover in desert areas with sandy/coarse soils. Seeds were traditionally harvested and roasted with hot coals to burn off the husks.

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RAIN AND FOREST GARDEN PLANT MATRIX - ROCKY MOUNTAIN REGION, USA

Latin Name	Common Name	USDA Hardiness Zone	Light Condition	Rain Garden Zone	Mature Height	Nitrogen Fixer	Nectary	Pest Repeller (thorny or aromatic)	Native Region	Edible Uses	Other Uses	Special Notes
Schizachyrium scoparium	Little Bluestem Grass	3-8	Full Sun	Top/Terrace	2-3'				North America	None known	Erosion Control	An excellent species to include for beneficial insect nesting and breeding habitat.
Fungal Layer (very successful gourmet mushroom species)												
Pleurotus ostreatus	Oyster	All	Full Shade	Bottom	6-8"				Global	Mushrooms	Decomposer of hardwoods, Bioremediator of hydrocarbons	Inoculate hardwood logs (Cottonwood, Alder, Elm) and place them in the bottoms of rain gardens. They fruit when it rains. Forage style harvest. The best gourmet mushroom for the arid West. All others are very difficult due to aridity.
Stropharia rugosoannulata	King Stropharia	All	Part Shade/Full Shade	Terrace/Bottom	6-8"				North America/Europe	Mushrooms	Decomposer of woodchips, Bioremediator of hydrocarbons, Mycorrhizal	Inoculate all woodchips in rain gardens with spawn. It fruits when it rains. Forage style harvest. Stem butts can be used to inoculate new woodchips. Woodchips need to be renewed every couple years to keep the fungi productive.

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Latin Name	Common Name	USDA Hardiness Zone	Light Condition	Rain Garden Zone	Mature Height	Nitrogen Fixer	Nectary	Pest Repeller (thorny or aromatic)	Native Region	Edible Uses	Other Uses	Special Notes
Vine and Bramble Layer (plants that climb and/or prefer structural support)												
Rubus idaeus	Raspberry	3-9	Full Sun/Part Shade	Terrace	4-6'		✔	✔	Eurasia	Fruit	Medicinal	Seems to prefer part shade in this region. Needs to be divided every two years to keep at peak productivity. Primocane fruiting cultivars recommended. Leaf is used medicinally. Spreading nature makes them less suitable for rain gardens.
Rubus occidentalis	Black Raspberry	4-7	Full Sun	Terrace	3-6'		✔	✔	Eastern North America	Fruit		Delicious fruit. Spreads by tip layering and needs to be given plenty of space. Thorny to a fault. Worth putting up with for the fruit quality.

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Rubus fruticosus	Blackberry	5-8	Full Sun/Part Shade	Terrace	4-8'		✔	✔	Europe	Fruit		Thornless varieties available. Ensure fruit quality before planting. The author has planted thornless varieites with horrible fruit quality. Takes up lots of room. Worth figuring out how to grow successfully. Applicable for only the largest rain gardens.
Lycium barbarum	Gojiberry	5-9	Full Sun	Top/Terrace	5-10'			✔	Asia	Fruit, Shoots can be cooked as well		Highly medicinal fruit. Naturalized throughout Front Range of Colorado and other parts of region.
Vitis vinifera	Grape	5-9	Full Sun	Terrace	12-20'				Eurasia/North Africa	Fruit		Seedless and seeded cultivars abound. Concord and Niagra, both seeded, grow very easily and well throughout the region. The author has had good success with seedless varieites.
Actinidia arguta	Hardy Kiwi	4-8	Full Sun	Terrace	20-100'				Eurasia	Fruit		The author has yet to eat a Rocky Mountain grown Hardy Kiwi. Grows exhuberantly outside of the region.
Humulus lupulus	Hops	4-8	Full Sun	Terrace/Bottom	15-30'				Eurasia	Seed cones for flavoring	Medicinal	A value crop to grow for homebrewers!

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RAIN AND FOREST GARDEN PLANT MATRIX - ROCKY MOUNTAIN REGION, USA

Humulus lupulus var. neomexicana	Western Hops	5-8	Full Sun/Part Shade	Terrace/Bottom	15-30'				Western North America	Seed cones for flavoring	Medicinal	A native version of hops. Grows as close to water as it can get, but should have more drought resistance. The author has seen them in high desert canyons with no water moving through for months.
Apios americana	Groundnut	3-10	Part Shade	Terrace	4-12'	✔			North America	Tubers		One of the most important ethnobotanical plants for the Eastern parts of the region. Very difficult to grow in the authors experience. Sandy soil, just the right amount of shade, and regular moisture are needed. If successful, roots are harvested every other year. There are native patches just East of the cities of Boulder and Denver, CO.
Passiflora incarnata	Maypop	6-10	Full Sun	Terrace	10-30'		✔		Southeast US	Fruit	Medicinal	This species is proven to grow and survive in the warmer parts of the region, or in warm microclimates. The most beautiful flowers around. Highly valuable medicinal vine and flowers. Fruit is a passionfruit.

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Latin Name	Common Name	USDA Hardiness Zone	Light Condition	Rain Garden Zone	Mature Height	Nitrogen Fixer	Nectary	Pest Repeller (thorny or aromatic)	Native Region	Edible Uses	Other Uses	Special Notes
Wisteria floribunda	Japanese Wisteria	4-9	Full Sun	Terrace	30-50'	✔			Asia	Poisonous		Mostly a very ornamental arbor cover. Beautiful! Fixes nitrogen into abundant biomass. Can spread aggressively. Often planted where mown.
Wisteria frutescnes	American Wisteria	5-9	Full Sun	Terrace	15-30'	✔			Eastern North America	Poisonous		Mostly a very ornamental arbor cover. Beautiful! Fixes nitrogen into abundant biomass. Can spread aggressively. Often planted where mown.
Wetland and Bog Layer (plants that thrive in water saturation zones)												
Lemna minor	Duckweed	4-10	Full Sun/Part Shade	Bottom	1"	✔			Global		Fodder	Good for ponds or very wet rain gardens. Can survive without standing water, but not for long. Excellent fish food.
Sagittaria latifolia	Wapato	5-10	Full Sun	Bottom	1-4'				North America	Tubers		Also called Duck Potato, this is an important ethnobotanical species. Beautiful and delicious tubers when boiled. Prefers standing water.

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Typha latifolia	Cattail	3-10	Full Sun	Bottom	4-6'				Global	Shoots, Tubers		A useful sepcies to fill niches in the bottoms of rain gardens. Dwarf varieties are available. Known as the liver of the plant world for filtering toxins. Not recommended for food.
Oenanthe javanica	Water Celery	6-11	Full Sun/Part Shade	Bottom	2-3'		✔		Southeast Asia	Leaves, Shoots	Bee Forage	Will grow without standing water. Relished as a perennial vegetable in Asia. This author has a hard time consuming it in any quantity.
Nelumbo nuciferia	Lotus	4-10	Full Sun	Bottom	3-6'		✔		Asia/Australia	Seeds, Tubers		Needs standing water. Conducive to pond culture. Absolutely beautiful!
Nuphar luteum	Yellow Pond Lily	4-10	Full Sun	Bottom	2'		✔		North America	Tubers		Needs standing water. Conducive to pond culture. North American native lotus-like pond plant.
Nasturtium officinale	Watercress	3-11	Full Sun	Bottom	1-3'		✔		Eurasia	Leaves	Bee Forage	Will grow without standing water. Tasty salad crop. Can grow in frequent flood and drain basins.
Mentha aquatica	Water Mint	5-9	Full Sun	Bottom	3'		✔		Eurasia/North Africa	Leaves for tea	Bee Forage	Will grow without standing water. Can grow in frequent flood and drain basins.

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