Union St. Rain Garden
Plant Catalog

City of Olean

Jennifer Tompkins, E.I.T.
Supervisor of Operations
City of Olean
Dept. of Public Works
Phone: (716) 376-5692
Cell: (716) 790-3173
Email: jtompkins@cityofolean.org
Website: www.cityofolean.org
# TABLE OF CONTENTS

INTRODUCTION .................................................................................. PG 3

SHRUBS ...................................................................................... PG 4-11

PERENNIAL GRASSES ..................................................................... PG 12-16

HERBACEOUS PERENNIALS .......................................................... PG 17-27

GROUND COVER ........................................................................... PG 28
Introduction

Before our region was developed, forests and open spaces absorbed rainwater. As we built cities and towns and added hard surfaces, the amount and rate of rainwater runoff (also known as stormwater) entering rivers and stormwater pipes increased significantly. That rainwater also picks up pollutants as it flows across impervious areas. If not properly managed, rainwater can carry pollutants to rivers, erode and flood river banks or overload the storm sewer system. Sustainable stormwater facilities (i.e. Low Impact Development-LID) attempt to mimic the natural water cycle. They function to slow and reduce the amount of stormwater that enters rivers and pipes as well as filter pollutants to protect our infrastructure and watersheds.

The City of Olean has had the rare opportunity to contribute to the sustainable storm water practices through the use of Rain Gardens (i.e. bio-retention facilities) along the newly built Union Street Corridor. The following is a catalog of the various species of plants introduced to the rain gardens in an effort to facilitate the natural water cycle and promote the propagation of native bird and insect species. Several of the plants which have been installed in our local gardens have many benefits to species recently listed as endangered or threatened, such as Monarch butterflies and the bumble bee. The following catalog of plant species can also be found in naturalized environments across the North American continent.

In an effort to increase public awareness and education, a broad compilation of the plant description and cultivation methods have been summarized in the following document.
Shrubs

**Aronia Melanocarpa – Black Cherry 3 gal.**
Height 18-24”

**IDENTIFICATION:**
*Aronia melanocarpa*, commonly called black chokeberry, is an open, upright, spreading, somewhat rounded but leggy, suckering, deciduous shrub that typically grows 3-6’ tall. It is native to low woods, swamps, bogs and moist thickets but occasionally to dry upland areas, from Newfoundland to southern Ontario and Minnesota south to Missouri, Tennessee and Georgia. It is noted for its 5-6 flowered clusters of white 5-petaled spring (May) flowers, glossy elliptic to obovate dark green leaves (to 2-3” long) with finely toothed margins, black autumn berries (blueberry size) and purple/red fall color.

**CULTIVATION:**
Aronia is considered cold hardy and heat tolerant in USDA Zones 3 to 8. Aronia plants grow well both in orchard-type rows or set as landscape elements. Easily grown in average, medium moisture, well-drained soils in full sun to part shade. Plants have a wide range of soil tolerance including boggy soils. Best fruit production usually occurs in full sun. Remove root suckers to prevent colonial spread.
Clethra Alnifolia “Hummingbird" 3 gal
Height 18-24”

IDENTIFICATION:
*Clethra alnifolia*, commonly called summersweet, is a deciduous shrub that is native to swampy woodlands, wet marshes, stream banks and seashores, often in sandy soils, along the coast from Maine to Florida and west to Texas. It is a rounded, suckering, densely-branched, deciduous shrub that typically grows to 3-6' (less frequently to 8’) tall and is noted for producing a mid to late summer bloom of sweetly fragrant white flowers which appear in narrow, upright panicles (racemes to 2-6" long). Flowers give way to dark brown seed capsules (1/8” diameter) which may persist into winter. Mature stems have scaly, dark gray to brown black bark. Serrate, obovate to oblong, glossy dark green leaves (to 3-4” long) turn variable but generally attractive shades of yellow to golden brown in fall. Flowers are very attractive to butterflies and bees.

CULTIVATION:
Easily grown in average, medium to wet soils in full sun to part shade. Prefers part shade and consistently moist, acidic, sandy soils. Soils should not be allowed to dry out. Tolerates clay soils. Tolerates full shade. Promptly remove root suckers unless naturalized look is desired. Propagate by cuttings. Prune if needed in late winter.
**Cornus Sericea “Kelseyi”-Kelsey’s Dwarf Red Twig Dogwood 3 gal**  
**Height 18-24”**

**IDENTIFICATION:**  
In the wild, it commonly grows in areas of damp soil, such as wetlands. It is a medium to tall deciduous shrub, growing 1.5–4 m tall and 3–5 m wide, spreading readily by underground stolons to form dense thickets. The branches and twigs are dark red, although wild plants may lack this coloration in shaded areas. The leaves are opposite, 5–12 cm long and 2.5–6 cm broad, with an ovate to oblong shape and an entire margin; they are dark green above and glaucous below; fall color is commonly bright red to purple. The flowers are small (5–10 mm diameter), dull white, in clusters 3–6 cm diameter. The fruit is a globose white berry 5–9 mm diameter.

**CULTIVATION:**  
*Cornus sericea* is a popular ornamental shrub that is often planted for the red coloring of its twigs in the dormant season. *C. sericea* is frequently used for waterway bank erosion protection and restoration in the United States and Canada. Its root system provides excellent soil retention, it is hardy and provides an attractive shrub even when bare in winter, and its ability to be reproduced by cuttings makes it a low cost solution for large scale plantings.
Llex Glabra “Compacta” – Compact Inkberry Holly 3 gal
Height 18-24”

IDENTIFICATION:
Spineless, flat, ovate to elliptic, glossy, dark green leaves (to 1.5” long) have smooth margins with several marginal teeth near the apex. Leaves usually remain attractive bright green in winter unless temperatures fall below -17 C/0 F. Greenish white appear in spring, but are relatively inconspicuous. If pollinated, flowers give way to pea-sized, jet black, berry-like drupes (inkberries to 3/8” diameter) which mature in early fall and persist throughout winter to early spring unless consumed by local bird populations.

CULTIVATION:
Easily grown in average, medium to wet soils in full sun to part shade. Adaptable to both light and heavy soils. Tolerates wet soils. Prefers rich, consistently moist, acidic soils in full sun. Good shade tolerance, however. Avoid neutral to alkaline soils. Inkberries are dioecious (separate male and female plants). Female plants need a male pollinator in order to produce the berry-like drupes that are characteristic of the species and cultivars. Prune to shape in early spring just before new growth begins. Plants generally need minimal pruning unless used as a hedge (perhaps best grown as an informal hedge). Remove root suckers regularly if colonial spread is not desired.
**Llex verticillata “Red Sprite” - Red Sprite Winterberry 3 gal**

**Height 18-24”**

**IDENTIFICATION:**
This is a slow-growing, deciduous shrub with an upright-rounded habit that typically grows 3-12’ tall. In the wild, it often suckers to form large thickets or colonies. Elliptic to obovate, toothed, dark green leaves (2-3” long). Fall color is usually negligible, but in some years leaves may turn attractive shades of maroon. Relatively inconspicuous greenish-white flowers appear in the leaf axils in late spring. Flowers, if properly pollinated, give way to a crop of bright red berries (1/4” diameter) in late summer to fall. Berries are quite showy and will persist throughout the winter (hence the common name) and often into early spring. Berries provide considerable impact and interest to the winter landscape.

**CULTIVATION:**
Easily grown in average, acidic, medium to wet soils in full sun to part shade this plant is adaptable to both light and heavy soils, but prefers moist, acidic, organic loams. Good tolerance for poorly drained soils including wet boggy or swampy conditions (this species is native to swampy areas of Eastern North America).
Myrica Pennsylvanica-Bayberry 3 gal
Height 18-24”

IDENTIFICATION:
*Myrica pensylvanica* is a deciduous shrub growing to 4.5 m tall. The leaves are 2.5–7 cm long and 1.5-2.7 cm broad, broadest near the leaf apex, serrate, and sticky with a spicy scent when crushed. The flowers are borne in catkins 3–18 mm long, in range of colors from green to red. The fruit is a wrinkled berry 3-5.5 mm diameter, with a pale blue-purple waxy coating.

CULTIVATION:
This shrub is hardy into USDA hardiness zone 2. Very tough and easily-grown, Bayberry can tolerate a variety of landscape settings from full sun to partial shade, wet swamplands or high, dry and alkaline areas. Growth is thin in total shade. Bayberry is also very salt-tolerant (soil and aerosol), making it suitable for seaside applications. It is adapted to parking lot and street tree planting.
Spirea “Anthony Waterer” – Anthony Waterer Spirea 3 gal
Height 18-24”

**IDENTIFICATION:**
This deciduous, dwarf shrub has showy clusters of rosy pink blooms that are eye-catching during summer, and foliage that turns reddish-maroon during fall. It makes an attractive addition to a cottage garden, butterfly garden, or mixed border.

**CULTIVATION:**
These plants may require regular watering during establishment. Like most plants, they benefit from a 2- to 3-inch layer of organic mulch to help retain soil moisture. Apply a slow-release fertilizer in early spring as new growth begins. Prune to shape after flowering; for a formal appearance, shear annually after flowering.
Spirea Latifolio- Meadowsweet 1 gal

IDENTIFICATION:
Narrowleaf meadowsweet shrubs often reach 8 feet in height with a spread of 3–4 feet. This species is often the most conspicuous part of the vegetation in its habitat, taking up large areas of ground. Its leaves are glossy yellow-green, oblong or lance-shaped, and toothed on the edges, and its twigs are tough and yellowish brown. Fall foliage is golden yellow. The white and sometimes pink fragrant flowers grow in spike-like clusters at the ends of the branches, blooming from early summer through September. The brown fruit, which persists after flowering, is a distinctive feature of all Spiraea. Butterflies and other beneficial insects visit the plant for nectar and pollen. In autumn brown seed capsules appear and are fed on by songbirds. Glossy green foliage turns yellow in the fall. Deer tend to leave this plant alone. Meadowsweet is a host plant for the larvae of the spring azure butterfly. The blooms make a good cut flower.

CULTIVATION:
Spirea are easy-care shrubs that flower best when grown in full sun. They can be planted in the spring or fall. Hardiness Zone: variable; 3 – 8, the large, arching species usually bloom in the spring, while the smaller, upright species generally bloom in the summer. Spring-flowering spirea should be pruned right after they bloom, before new buds start to form for the following year’s flowers. Summer-flowering spirea should be pruned in late winter or early spring. Cut old canes back at ground level. Bushes can be rejuvenated by removing one-third of the plant, keeping the youngest and most vigorous canes and removing the oldest. Spirea are easily propagated from cuttings of green tip shoots taken in late spring and summer. They root best if given bottom heat. Mature wood cuttings can be taken in autumn and rooted in a cold frame.
Perennial Grasses

Elymus Canadensis- Canadian Wild Rye 2” plugs
Plant 18 “ O. C.

IDENTIFICATION:
Canada wildrye is a native perennial bunchgrass that grows to 4 feet with erect or arching culms and flat, wide (up to 0.8 inches), waxy green, pointed leaves that grow from the base of the stem to the spike. Auricles are claw-like and clasping, arising from a broad, yellowish or light green collar. The thick and bristly spikelets can reach 10 inches in length.

CULTIVATION:
Exceptional seedling vigor and rapid establishment make Canada wildrye an excellent species for use in erosion control seedings. Stands of Canada wildrye typically establish during the 1st year, reach peak production the 2nd or 3rd year, and then rapidly thin out. This species is sometimes used in seeding mixtures where quick development and stabilization is needed.
**Juncus Effusus – Soft Rush 2” Plug**

**Plant 15” O.C.**

**IDENTIFICATION:**
Juncus effusus is a slow spreading, clump forming, grass-like perennial which emerges from a stout branching rootstock. The short, finely divided rhizomes are 6 to 10 inches long, growing from 1/4 to 2 inches beneath the soil surface. The culms are smooth, erect, bright green and hollow, with reduced basal leaves. New shoots emerge and develop in late summer, reaching up to 4 feet tall at maturity the following spring.

**CULTIVATION:**
The dense stands that soft rush form have deep fibrous root systems, which provide very good shoreline protection, filter suspended solids, up-take nutrients, and facilitate substrate oxidation. With its low pH and metal tolerances, soft rush often survives polluted conditions. Annual draw down periods must be scheduled to maintain vegetative parts and encourage seedling establishment of soft rush. Individual stems inside a clump of evergreen rush die each year, while the main clump remains green and healthy. In late summer, remove the dead material to improve the clump's appearance. Put on the rubber gloves and comb through the foliage with your fingers, gently pulling on the stems. The gloves will grip the dead stems, which easily pull free from the base of the plant. You can repeat this at any time during the spring and summer growing season if there are a large number of dead stems mixed in with the living. In areas where rush dies back each winter, cut back the entire clump with disinfected shears in late winter or early spring. Evergreen clumps only need to be cut back every three or four years in late winter, or when they begin to look sparse and ragged. Cut all the leaf stems back to a 1 inch tall, removing and disposing of the dead foliage. New growth will emerge from the base of the plant when growth resumes in spring.
Panicum Virgatum Shenandoah – Red Switch Grass 1 Gal
Plant 36” O.C.

IDENTIFICATION:
Panicum virgatum, commonly called switch grass, is a native ornamental grass which was an important component of the tallgrass prairie which once covered large areas of the State. It occurs in both wet and dry soils in prairies and open woods, gravel bars and stream banks and along railroad tracks throughout most of the State. Switch grass is generally noted for its stiff, columnar form, and typically retains its vertical shape throughout the growing season. It is a clump-forming, warm season grass which typically grows to 3’ tall. When in flower, flower panicles may bring total plant height to 6’. Features medium green leaves which turn yellow (sometimes with orange tints) in autumn, fading to tan-beige in winter. Foliage clump is topped in mid-summer by finely-textured, pink-tinged, branched flower panicles which hover over the foliage like an airy cloud. Panicles turn beige as the seeds mature in fall with the seed plumes persisting well into winter. Seeds are a food source for birds in winter.

CULTIVATION:
Easily grown in average, medium to wet soils in full sun to part shade. Tolerates a wide range of soils, including dry ones, but prefers moist, sandy or clay soils. Tolerates occasional flooding. May flop in overly rich soils. Generally performs best in full sun. Will grow in part shade, but begins to lose its form in too much shade, growing more openly and possibly falling over. Grows primarily in clumps, but will slowly spread by slightly creeping rhizomes. Cut back clumps to the ground in late winter to early spring. Plants may self-seed in optimum growing conditions but cultivars may not come true from seed.
Pennisetum Alopecuroides – Hameln Fountain Grass 1 gal
Plant 30” O.C.

IDENTIFICATION:
The white inflorescence resembles a bottle brush and persists into fall. These attractive, 5- to 7-inch-long flowers persist on the plant from summer to fall but shatter in the early winter. The foliage of fountain grass is bright green during the summer but turns to a golden brown color in the fall after the flowers begin to die. The foliage arches near the tip and gives the plant a graceful fountain shape. Fountain grass is an outstanding, elegant, fine-textured ornamental grass.

CULTIVATION:
Dwarf fountain grass requires little maintenance, and is perennial in U.S. Department of Agriculture plant hardiness zones 5 to 9. Favoring a sunny, well-drained location, the plant grows to 2 feet wide and 1 to 2 feet tall. Graceful, brush-like flower spikes rise 3 to 6 inches above the foliage. Dwarf fountain grass dies back in winter. Pruning removes the dead foliage, clearing the way for spring’s renewal. Dwarf fountain grass can be pruned at any time after it has died back for the winter, and before new growth appears in early spring. Cut the old foliage 3 to 4 inches above the ground. Use pruning shears on a smaller plant; hedge trimmers are best on a more mature dwarf fountain grass specimen.
Schizachyrium Scoparium – Little Blue Stem
Plant 24” O.C.

IDENTIFICATION:
Little bluestem is a tufted, warm-season, perennial grass broadly distributed and native to the U.S. and Canada. Because of this broad distribution, little bluestem exhibits significant ecotypic variation. Plants vary in height, color, length of leaves, flowering, and clump diameter. It grows from 1 to 3 feet tall with culms slightly flattened. The blades are folded, sometimes rolled inward, and smooth to hairy.

CULTIVATION:
Little bluestem begins growth later in the spring after the cool-season species have already developed. It tolerates glyphosate when dormant, and other herbicides as labeled for grasses. Weed control can be accomplished by mowing, especially the first year when the planted grass is short.
Herbaceous Perennials

Asclepias Tuberosa – Butterfly Weed 2” Plug
Plant 18” O.C.

IDENTIFICATION:
Asclepias tuberosa, commonly called butterfly weed, is a tuberous rooted, native perennial which occurs in dry/rocky open woods, glades, prairies, fields and roadsides. It typically grows in a clump to 1-3’ tall and features clusters of bright orange to yellow-orange flowers atop upright to reclining, hairy stems with narrow, lance-shaped leaves. Unlike many of the other milkweeds, this species does not have milky-sapped stems. Flowers give way to prominent, spindle-shaped seed pods (3-6” long) which split open when ripe releasing numerous silky-tailed seeds for dispersal by the wind. Seed pods are valued in dried flower arrangements. Long bloom period from late spring throughout the summer. Flowers are a nectar source for many butterflies and leaves are a food source for monarch butterfly larvae (caterpillars). Also commonly called pleurisy root in reference to a prior medicinal use of the plant roots to treat lung inflammations.

CULTIVATION:
Easily grown in average, dry to medium, well-drained soils in full sun. Drought tolerant. Does well in poor, dry soils. New growth tends to emerge late in the spring. Plants are easily grown from seed, but are somewhat slow to establish and may take 2-3 years to produce flowers. Mature plants may freely self-seed in the landscape if seed pods are not removed prior to splitting open. Butterfly weed does not transplant well due to its deep taproot, and is probably best left undisturbed once established.
Chrysogonum Virginianum – Green and Gold 2” Plug
Plant 15” O.C.

**IDENTIFICATION:**
*Chrysogonum virginianum*, commonly called goldenstar, is a rhizomatous, low-growing perennial which typically forms a foliage mat to 3-4” tall spreading to 18” wide or more. It is native to woodland areas from Pennsylvania to Florida and Louisiana. Star-shaped, daisy-like, bright yellow flowers (to 1.5” diameter) on stems originating in the leaf axils, bloom spring to fall in cool summer climates. In hot summer climates, bloom is profuse in spring, but usually becomes sparse or stops in the heat of the summer, with a light rebloom occurring in fall. Flowering stems rise above the foliage mat to a height of 8-10” tall. Each flower has five, rounded, slightly-notched, yellow petals and a center tuft of yellow disk flowers. Ovate, toothed, bright green leaves to 3” long.

**CULTIVATION:**
Easily grown in average, medium moisture, well-drained soils in part shade to full shade. Prefers moist, acidic, organically rich soils in sun-dappled part shade. Tolerates full sun only if grown in consistently moist soils. Spreads by rhizomes to form an attractive ground cover, but is easily controlled. Remove spent flower stems for best ground cover appearance. Easily grown from seed and may self-seed in the garden.
Coreopsis Verticillata “Moonbeam” – Moonbeam Coreopsis 1 gal Plant 18” O.C.

**IDENTIFICATION:**
Coreopsis 'Moonbeam' is a dependable bloomer and all-round fantastic plant. The flowers are a glowing, lemon-yellow color and sit on top of tall, erect, lacy, somewhat mound forming, delicate (threadleaf) looking green foliage that has an airy appearance. The flowers are plentiful and bloom continuously throughout the entire summer. If the dead blossoms are removed, flowers will be more abundant and healthy.

**CULTIVATION:**
Threadleaf Coreopsis forms a spreading clump of very delicate, ferny foliage. This outstanding selection bears loads of starry creamy-yellow daisies, from early summer into late fall. Clipping off faded flowers will encourage buds to form all season. Tolerant of hot, dry sites, once established. Excellent for cutting. Great for edging in the sunny border, or planting in mixed containers. Tolerates heat and humidity. Easily divided in early spring. A former Perennial Plant of the Year, this has performed consistently well in gardens all over the continent.
Hemerocallis “Happy Returns” – Happy Returns Daylilly 1 gal
Plant 24” O.C.

**IDENTIFICATION:**
A favorite perennial for its showy blooms. Large clumps of long, grass-like leaves are highlighted by bright yellow flowers on tall stems. This extra-early bloomer reblooms throughout the summer months. Good for firescaping. Semi-evergreen in mild winter areas.

**CULTIVATION:**
Easily grown in average, medium moisture, well-drained soils in full sun to part shade. Daylilies perform well in a wide range of soils, but prefer deep, fertile loams. Deadhead spent flowers daily for neatness and remove scapes when flowers have completed bloom. Plants are tolerant of summer heat and humidity, but appreciate deep watering in dry spells to keep foliage attractive. For best performance, daylilies should be divided every 3-4 years in either fall or spring. Hybrid daylilies will not come true from seed.
Hemeracollis “Rosey Returns” – Rosey Returns Daylilly 1 gal
Plant 24” O.C.

IDENTIFICATION:
A favorite perennial for its showy blooms. Large clumps of long, grass-like leaves are highlighted by bright pink flowers on tall stems. This extra-early bloomer reblooms throughout the summer months. Good for firescaping. Semi-evergreen in mild winter areas.

CULTIVATION:
Easily grown in average, medium moisture, well-drained soils in full sun to part shade. Daylilies perform well in a wide range of soils, but prefer deep, fertile loams. Deadhead spent flowers daily for neatness and remove scapes when flowers have completed bloom. Plants are tolerant of summer heat and humidity, but appreciate deep watering in dry spells to keep foliage attractive. For best performance, daylilies should be divided every 3-4 years in either fall or spring. Hybrid daylilies will not come true from seed.
Hemeracollis “Little Grapette” Little Grapette Daylilly 1 gal
Plant 24” O.C.

IDENTIFICATION:
A favorite perennial for its showy blooms. Large clumps of long, grass-like leaves are highlighted by bright purple flowers on tall stems. This extra-early bloomer reblooms throughout the summer months. Good for firescaping. Semi-evergreen in mild winter areas.

CULTIVATION:
Easily grown in average, medium moisture, well-drained soils in full sun to part shade. Daylilies perform well in a wide range of soils, but prefer deep, fertile loams. Deadhead spent flowers daily for neatness and remove scapes when flowers have completed bloom. Plants are tolerant of summer heat and humidity, but appreciate deep watering in dry spells to keep foliage attractive. For best performance, daylilies should be divided every 3-4 years in either fall or spring. Hybrid daylilies will not come true from seed.
Liriope Muscari “Big Blue” – Big Blue Liriope 1 gal
Plant 24” O.C.

**IDENTIFICATION:**
*Liriope muscari*, commonly called lilyturf or blue lily turf, is a tufted, tuberous-rooted, grass-like perennial which typically grows 12-18” tall and features clumps of strap-like, arching, glossy, dark green leaves (to 1” wide). Clumps slowly expand by short stolons. Erect, showy flower spikes with tiered whorls of dense, violet-purple flowers rise above the leaves in late summer. Flowers give way to blackish berries which often persist into winter.

**CULTIVATION:**
Easily grown in average, medium moisture, well-drained soil in full sun to part shade. Prefers moist, fertile soils in part shade. Tolerates a wide range of light conditions and soils. Will grow in close to full shade, but will produce more elongated foliage and spread more slowly. Also has good tolerance for heat, humidity and drought. Foliage is evergreen in warm southern climates, but declines considerably in areas with cold winters. Cut foliage to the ground (mow large plots on high mower setting) in late winter to early spring in preparation for new growth. Plants may not be reliably winter hardy in the northern parts of USDA Zone 5 where they should be sited in protected locations.
Monarda Punctata - Spotted Horsemint 2” Plug
Plant 18” O.C.

IDENTIFICATION:
An aromatic, erect perennial ranging from only 6 in. to almost 3 ft. tall. Rosettes of yellowish, purple-spotted, tubular flowers occur in whorls, forming a dense, elongated spike at the end of the stem or from leaf axils. Each whorl is subtended by large, conspicuous, whitish, purple-tinged, leaf-like bracts.

CULTIVATION:
The species is considered to be a short lived perennial or biennial. Plants reliably emerge from dormancy for 2 years and may reseed after that.
Physostegia Virginiana – Obedient Plant 2” plug
Plant 18” O.C.

IDENTIFICATION:
Physostegia virginiana, commonly called obedient plan or false dragonhead, is a rhizomatous perennial that is native to North America from Quebec to Manitoba south to Florida and New Mexico. It is commonly found in a variety of habitats including open meadows, prairies, stream banks, gravel bars, wooded bluff bases and railroad track right-of-ways (Steyermark). Tubular, two-lipped, snapdragon-like, pink to pale lilac flowers in upright terminal spikes (each to 12-18”) bloom throughout summer (late June-September) atop square stems rising to 2-4’ tall. Flowers bloom bottom to top on each spike, with each flower being subtended by a small leaf-like bract. Stems are clad with opposite, narrow-lanceolate, sharply-toothed leaves (to 3-6” long). Species plants are noted for being aggressive spreaders in the landscape by both rhizomes and self-seeding.

CULTIVATION:
Easily grown in average, moist, acidic, well-drained soils in full sun. Stems tend to flop in rich soils, too much shade or hot summer temperatures. Taller plants may need staking. Tolerates wet soils and some part shade.
Rudbeckia Hirta “Goldstrum” – Goldstrum Black-Eyed Susan 1 gal
Plant 24” O.C.

IDENTIFICATION:
Black-eyed Susan, (Rudbeckia hirta), is a tough, low-maintenance plant that produces yellow or orange blooms with deep brown, cone-like centers throughout summer and fall. At maturity, the plant reaches heights of up to 3 feet. Black-eyed Susan is suitable for U.S. Department of Agriculture plant hardiness zones 2 through 11.

CULTIVATION:
Although black-eyed Susan is a moderately drought-tolerant plant, the soil should never be bone dry. Water only when the top of the soil feels dry, as Black-eyed Susan is prone to rot in muddy soil. To produce long, healthy roots, provide enough water to soak the roots. Water the soil at the base of the plant, as overhead watering puts the plant at risk for mildew and other moisture-related diseases. Regular deadheading encourages black-eyed Susan to bloom prolifically all season. Without deadheading, the plant goes to seed early and blooming rapidly declines. To deadhead, pinch or cut blooms as soon as they wilt. Remove the wilted blossom, along with the stem, down to the next leaf or bud. Cut fresh black-eyed Susans for bouquets frequently.
Zizia Aurea – Golden Alexanders 2” Plugs
Plant 18” O.C.

IDENTIFICATION:
Golden Alexanders is a member of the carrot family, Apiaceae. It is an upright, native, perennial forb growing to 1 – 2 feet in height. Golden Alexanders is most noteworthy for its attractive bright yellow flower which occurs from May – June. The flower is less than .3 centimeters long. Each flower has 5 sepals, 5 petals and 5 stamens. A cluster of flowers gathers into an 8 centimeter long flat-topped flower head, the middle flower of each compound umbel being stalk less. Flowers give way to 3 – 4 millimeter long, oblong, green fruit capsules. The leaves as well as the fruit slowly turn light purple in the autumn.

CULTIVATION:
Grow in average, medium moisture, well-drained soils in full sun to part shade.
Ground Cover

Vinca Minor – Common Periwinkle
Plant 24” O.C.

IDENTIFICATION:
Vinca minor commonly known as vinca or periwinkle is one of the most popular and widely used ground covers. Trailing stems with smooth, evergreen leaves (to 1.5” long) root at the nodes as they go along the ground and quickly spread to form an attractive ground cover. Tubular, lavender blue, phlox-like flowers (to 1 inch across) appear in the leaf axils in spring and continue to flower intermittently throughout summer into fall. Foliage will mound up to 6” tall.

CULTIVATION:
Easily grown in average, dry to medium, well-drained soil in full sun to part shade. Tolerates full shade. Prefers moist, humusy soils in part shade. Plant 12-18” apart to cover large areas.