

FUNSHINE™

Abelia grandiflora 'Minacara1'

ppaf

Common name: abelia



Landscape Info:	
USDA/AHS zones:	USDA 6/AHS 9
Mature height:	2-3'/.6-.9m
Exposure:	Part sun-full sun
Irrigation:	Low-moderate

Features & Benefits:
<ul style="list-style-type: none"> - Improved version of Bronze Anniversary® abelia - Neat, rounded habit - New growth emerges in shades of gold and orange - Fragrant pink flowers in summer - Highly deer resistant and tolerant of shade



Cultural info:		
pH Level:	5.6 - 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	Moderate to high	
Watering:	Average	
Rooting Out Temp:	65 – 72°F/18.3 – 22.2°C	
Overwintering Temp:	40 – 50°F/4.4 – 10°C	
Sales Window:	Spring - autumn	
Blooms On:	New wood; long days initiate bloom	
Trimming/pruning:	4-5 times, early in season	
Vernalization:	Required	
Vigor Rating:	Average-fast	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	10-12 • 9-11 • 8-10
2 - 3 gallon	2 ¼" • 4" • QT	18-22 • 16-20 • 14-18

Grower Tips:
<ul style="list-style-type: none"> • Abelia grow best with low to average moisture; media should dry slightly between waterings. Good drainage is essential. • Allow 10-12 weeks after trimming for new flower buds to form. • Avoid fertilizing after late summer, as doing so can push soft growth that does not harden off properly before winter. • Plants must be at desired sale size before overwintering.
NOTES:

SUNJOY MINI MAROON™

Berberis thunbergii 'NCBT1'
ppaf, cbraf
Common name: barberry



Landscape Info:	
USDA/AHS zones:	USDA 4/AHS 8
Mature height:	1-2'/.3-.6 m
Exposure:	Full sun
Irrigation:	Dry to moist

Features & Benefits:	
<ul style="list-style-type: none"> - Sterile dark-leaf barberry - Low rounded habit - Foliage emerges red and matures to dark purple - Flowers and fruits but fruits contain no viable seed - Exceptional deer resistance and tolerance to challenging landscape conditions. 	



Cultural info:		
pH Level:	5.6 – 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	High	
Watering:	Low to average	
Rooting Out Temp:	65 – 72°F/18.3 – 22.2°C	
Overwintering Temp:	Polyhouse, no heat (where hardy)	
Sales Window:	Spring-fall	
Blooms On:	Old wood, but bloom is insignificant	
Trimming/pruning:	Trim three times, see tips at right	
Vernalization:	Required	
Vigor Rating:	Slow	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	20-22 • 17-19 • 16-18
2 -3 gallon	4" • QT	22-26 • 20-24

Grower Tips:	
<ul style="list-style-type: none"> • Prune once before bud break, once during flushing, and once more later in the season to produce a balanced plant. • Barberry does not rebound quickly from severe shearing or pruning - do not cut into thick stems. Trim to shape only. • All Sunjoy barberries are selected to require minimal pruning in order to take on desirable container presentation. • Watch for aphids, especially in spring. • Can be grown along with evergreens, as barberry requires similar conditions. • Potting a 2 ¼" liner directly to a 3 gallon is not recommended; however, you can produce a 3 gallon from a 2 ¼" through a one-gallon shift. Allow 16-20 additional weeks after potting to the larger container. 	
NOTES:	

SUNJOY TODO™

Berberis x 'NCBX1'

ppaf, cbraf

Common name: barberry



Landscape Info:	
USDA/AHS zones:	USDA 4/AHS 8
Mature height:	1.5-2.5' / .45-.76 m
Exposure:	Full sun
Irrigation:	Dry to moist

Features & Benefits:
<ul style="list-style-type: none"> - Sterile dark-leaf barberry - Very glossy, semi-evergreen foliage - Excellent disease resistance - Showy orange flowers - Fruit develops but seeds are hollow - Mounded habit



Cultural info:		
pH Level:	5.6 - 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 - 0.9	
Light Level:	High	
Watering:	Low to average	
Rooting Out Temp:	65 – 72°F/18.3 – 22.2°C	
Overwintering Temp:	Polyhouse, no heat (where hardy)	
Sales Window:	Spring-fall	
Blooms On:	Old wood	
Trimming/pruning:	Trim three times, see tips at right	
Vernalization:	Required	
Vigor Rating:	Slow	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	20-22 • 17-19 • 16-18
2 - 3 gallon	4" • QT	22-26 • 20-24

Grower Tips:
<ul style="list-style-type: none"> • Prune once before bud break, once during flushing, and once more later in the season to produce a balanced plant. • Barberry does not rebound quickly from severe shearing or pruning - do not cut into thick stems. Trim to shape only. • All Sunjoy barberries are selected to require minimal pruning in order to take on desirable container presentation. • Watch for aphids, especially in spring. • Can be grown along with evergreens, as barberry requires similar conditions. • Potting a 2 ¼" liner directly to a 3 gallon is not recommended; however, you can produce a 3 gallon from a 2 ¼" through a one-gallon shift. Allow 16-20 additional weeks after potting to the larger container.
NOTES:

PUGSTER® Amethyst

Buddleia 'SMNBDL'

ppaf, cbrf

Common name: butterfly bush



Landscape Info:	
USDA/AHS zones:	USDA 5/AHS 9
Mature height:	2'/.6 m
Exposure:	Full sun
Irrigation:	Moderate

Features & Benefits:
<ul style="list-style-type: none"> - Full-sized flowers on a dwarf plant - Very thick, sturdy stems ensure better winter survival in less-than-ideal conditions - Fragrant flowers attract pollinators - Rich amethyst-purple flowers; deadheading not needed for continuous bloom. - Deer resistant



Cultural info:		
pH Level:	5.6 - 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	High	
Watering:	Moderate (good drainage imperative)	
Rooting Out Temp:	65° - 72°F/18.3-22.2° C	
Overwintering Temp:	40 - 50°F/4.4-10° C	
Sales Window:	Spring through summer	
Blooms On:	New wood	
Trimming/pruning:	Trim 3-5 times	
Vernalization:	Not required	
Vigor Rating:	High	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	4" • QT	6-8 • 4-6
2 - 3 gallon	4" • QT	12-14 • 10-12

Grower Tips:
<ul style="list-style-type: none"> • Buddleia will rebloom approximately 4-6 weeks after trimming in summer. Multiple crop cycles will give you a continuous supply of ready-to-sell product, covered with large terminal blooms. • When trimming, do not cut into thick stems; trim to shape only. • Does not require deadheading for continuous bloom. • Buddleia are susceptible to spider mites; scout often and treat aggressively. • Avoid drought stress to minimize wilting and pest issues. • Taper off fertilizing and excessive watering in mid-late summer to minimize damage if crop is to be overwintered. Keep on the dry side when dormant. • Avoid fall pruning, and in spring, do not cut until new growth begins to emerge on stems. • Not recommended for fall sales/planting in zone 5.
NOTES:

PINPOINT™ Blue & Gold

Chamaecyparis lawsoniana

'SMNCLGTB' ppaf

Common name: Lawson's false cypress



Landscape Info:	
USDA/AHS zones:	USDA 5/AHS 8
Mature height:	15-20'/4.5-6.0m
Exposure:	Part – full sun
Irrigation:	Average

Features & Benefits:
<ul style="list-style-type: none"> - Very narrow habit saves space and makes a striking landscape accent. - Soft, feathery foliage is a deep green with yellow tips - Deer resistant evergreen - Needs no pruning to maintain shape



Cultural info:		
pH Level:	5.6 – 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	Moderate to high	
Watering:	Dry - moderate	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	Polyhouse, no heat (where hardy)	
Sales Window:	Evergreen, can be sold all season	
Blooms On:	Conifer; does not bloom	
Trimming/pruning:	See notes	
Vernalization:	Required	
Vigor Rating:	Average	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	16-20 • 15-19 • 14-18
2 - 3 gallon	1 gal shift	12-14 (see notes)

Grower Tips:
<ul style="list-style-type: none"> • Naturally grows as a narrow column with many short branchlets emerging from a main stem. Little pruning, aside from imposing a leader if necessary, is required. • If pruning is required, do not cut into heavy wood – trim soft growth only. • Avoid strong winter sun – clear poly in winter is not recommended. • Good drainage is imperative for a successful crop. A fungicide drench is recommended after potting and again in spring as a preventative against root rot diseases. • For 3 gallon plants, do not pot any size liner directly to the can; rather, use a one gallon shift. Add 12-14 weeks on top of time required to produce a one gallon.
NOTES:

PINPOINT™ Blue

Chamaecyparis lawsoniana

'SMNCLBF' ppaf

Common name: Lawson's false cypress



Landscape Info:	
USDA/AHS zones:	USDA 5/AHS 8
Mature height:	15-20'/4.5-6.0m
Exposure:	Part – full sun
Irrigation:	Average

Features & Benefits:
<ul style="list-style-type: none"> - Very narrow habit saves space and makes a striking landscape accent. - Soft, feathery foliage is a deep, rich blue - Deer resistant evergreen - Needs no pruning to maintain shape



Cultural info:		
pH Level:	5.6 – 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	Moderate to high	
Watering:	Moderate	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	Polyhouse, no heat (where hardy)	
Sales Window:	Evergreen, can be sold all season	
Blooms On:	Conifer; does not bloom	
Trimming/pruning:	Trim 1-2 times	
Vernalization:	Required	
Vigor Rating:	Average	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	16-20 • 15-19 • 14-18
2 - 3 gallon	1 gal shift	12-14 (see notes)

Grower Tips:
<ul style="list-style-type: none"> • Naturally grows as a narrow column with many short branchlets emerging from a main stem. Little pruning, aside from imposing a leader if necessary, is required. • If pruning is required, do not cut into heavy wood – trim soft growth only. • Avoid strong winter sun – clear poly in winter is not recommended. • Good drainage is imperative for a successful crop. A fungicide drench is recommended after potting and again in spring as a preventative against root rot diseases. • For 3 gallon plants, do not pot any size liner directly to the can; rather, use a one gallon shift. Add 12-14 weeks on top of time required to produce a one gallon.
NOTES:

SOFT SERVE® Gold

Chamaecyparis pisifera
 'FARROWCGMS' ppaf
 Common name: false cypress



Landscape Info:	
USDA/AHS zones:	USDA 4/AHS 8
Mature height:	6-10'/1.8-3.0m
Exposure:	Part – full sun
Irrigation:	Average

Features & Benefits:
<ul style="list-style-type: none"> - A gold version of Soft Serve® chamaecyparis - A compact, conical chamaecyparis that makes a refreshing substitute for Alberta spruce - Evergreen foliage is soft and fern-like, with a bright gold color - A deer-resistant alternative to arborvitae



Cultural info:		
pH Level:	5.6 – 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	Moderate to high	
Watering:	Moderate	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	Polyhouse, no heat (where hardy)	
Sales Window:	Evergreen, can be sold all season	
Blooms On:	Conifer; does not bloom	
Trimming/pruning:	Trim 1-2 times	
Vernalization:	Required	
Vigor Rating:	Average	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	16-20 • 15-19 • 14-18
2 - 3 gallon	1 gal shift	12-14 (see notes)

Grower Tips:
<ul style="list-style-type: none"> • Naturally pyramidal habit means little pruning is required to develop an appealing form – shear once or twice to shape after spring growth flush. • Following same protocol as 'Emerald Green' arborvitae will produce a handsome plant. • Avoid strong winter sun – clear poly in winter is not recommended. • For 3 gallon plants, do not pot any size liner directly to the can; rather, use a one gallon shift for best results. Add 12-14 weeks on top of time required to produce a one gallon.
NOTES:

SISTER DISCO™

Cytisus scoparius 'SMNCSCRY'

ppaf

Common name: Scotch broom



Landscape Info:	
USDA/AHS zones:	USDA 5/AHS 8
Mature height:	1-3'/.3-.9m
Exposure:	Full sun
Irrigation:	Dry - average

Features & Benefits:
<ul style="list-style-type: none"> - Bright yellow flowers are touched with red "beaks" - Small leaves give a fine-textured effect - Compact habit is about half the size of similar types - Thrives in full sun and dry conditions



Cultural info:		
pH Level:	5.6 – 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	High	
Watering:	Low to average	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	40 – 50° F/4.4 – 10° C	
Sales Window:	All season; spring bloom	
Blooms On:	Old wood	
Trimming/pruning:	Trim 1-2 times	
Vernalization:	Required	
Vigor Rating:	Average	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	10-12 • 9-11 • 8-10
2 - 3 gallon	4" • QT	18-20 • 16-18

Grower Tips:
<ul style="list-style-type: none"> • Blooms in early spring on old wood; cease trimming in late June as growth seems to shut down for summer. Doing so also allows flower buds to form for sale the following spring. • Best flowering will be on one-year old stems; do not allow the majority of the plant to become thick and woody. • Potting a 2 ¼" liner directly to a 3 gallon is not recommended.
NOTES:

SISTER REDHEAD™

Cytisus scoparius 'SMNCSAB'
ppaf
Common name: Scotch broom



Landscape Info:	
USDA/AHS zones:	USDA 5/AHS 8
Mature height:	3-4'/.9-1.2m
Exposure:	Full sun
Irrigation:	Dry - average

Features & Benefits:
<ul style="list-style-type: none"> - Deep red flowers show a touch of yellow at the tips - Small leaves give a fine-textured effect - Compact habit is about half the size of similar types - Thrives in full sun and dry conditions



Cultural info:		
pH Level:	5.6 – 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	High	
Watering:	Low to average	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	40 – 50° F/4.4 – 10° C	
Sales Window:	All season; spring bloom	
Blooms On:	Old wood	
Trimming/pruning:	Trim 1-2 times	
Vernalization:	Required	
Vigor Rating:	Average	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	10-12 • 9-11 • 8-10
2 - 3 gallon	4" • QT	18-20 • 16-18

Grower Tips:
<ul style="list-style-type: none"> • Blooms in early spring on old wood; cease trimming in late June as growth seems to shut down for summer. Doing so also allows flower buds to form for sale the following spring. • Best flowering will be on one-year old stems; do not allow the majority of the plant to become thick and woody. • Potting a 2 ¼" liner directly to a 3 gallon is not recommended.
NOTES:

SISTER ROSIE™

Cytisus scoparius 'SMNCSDRY'

ppaf

Common name: Scotch broom



Landscape Info:

USDA/AHS zones:	USDA 5/AHS 8
Mature height:	2-3'/.6-.9m
Exposure:	Full sun
Irrigation:	Dry - average

Features & Benefits:

- Dusty pink pea-shaped flowers show a touch of yellow at the tips
- Small leaves give a fine-textured effect
- Compact habit is about half the size of similar types
- Thrives in full sun and dry conditions

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FLOWERING SHRUBS

Cultural info:

pH Level:	5.6 – 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	High	
Watering:	Low to average	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	40 – 50° F/4.4 – 10° C	
Sales Window:	All season; spring bloom	
Blooms On:	Old wood	
Trimming/pruning:	Trim 1-2 times	
Vernalization:	Required	
Vigor Rating:	Average	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	10-12 • 9-11 • 8-10
2 - 3 gallon	4" • QT	18-20 • 16-18

Grower Tips:

- Blooms in early spring on old wood; cease trimming in late June as growth seems to shut down for summer. Doing so also allows flower buds to form for sale the following spring.
- Best flowering will be on one-year old stems; do not allow the majority of the plant to become thick and woody.
- Potting a 2 ¼" liner directly to a 3 gallon is not recommended.

NOTES:

TEMPLE OF BLOOM™

Heptacodium miconioides

'SMNHMRF' ppaf

Common name: seven-son flower



Landscape Info:	
USDA/AHS zones:	USDA 5/AHS 9
Mature height:	6-10'/1.8-3.0m
Exposure:	Part – full sun
Irrigation:	Moderate

Features & Benefits:
<ul style="list-style-type: none"> - Heptacodium is a large shrub or small tree with four season interest: high quality foliage, fragrant late summer flowers, red bracts in autumn, and peeling bark in winter. - Temple Of Bloom™ heptacodium offers earlier blooming, compact habit, & deep red bracts. - A superb specimen plant.



Cultural info:		
pH Level:	5.6 - 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	Average - high	
Watering:	Average	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	Poly house, no heat (where hardy)	
Sales Window:	Spring-fall (summer bloom, attractive all season)	
Blooms On:	New wood	
Trimming/pruning:	Trim 2-3 times	
Vernalization:	Required	
Vigor Rating:	Average-fast	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	10-12 • 9-11 • 8-10
2 - 3 gallon	4" • QT	14-16 • 12-14

Grower Tips:
<ul style="list-style-type: none"> • We recommend that this plant be sold as a one-year-old 3 gallon to allow the most time for proper shaping and training. • At potting time, decide if you want to grow plants as single stemmed or multi-stemmed and prune liner accordingly, if necessary. • Single stemmed specimens should be staked at potting time. • Subsequent trimming should be done with an eye toward imposing the desired habit – for example, single stemmed specimens should have all growth on the trunk pruned off; multi-stemmed should have new growth trimmed to shape up to three times. • Do not pot a 2 ¼" directly to a 3 gallon; rather, employ a one gallon shift, allowing an additional 14-16 weeks after repotting.
NOTES:

SUGAR TIP® Gold

Hibiscus syriacus 'THEISSHSSTL'

ppaf, cbrf

Common name: rose of Sharon



Landscape Info:	
USDA/AHS zones:	USDA 5/AHS 9
Mature height:	4-5'/1.2-1.5m
Exposure:	Full sun
Irrigation:	Low to moderate

Features & Benefits:
<ul style="list-style-type: none"> - Variegated rose of Sharon: green leaves are edged with a wide gold margin. - Lavender double flowers emerge from variegated buds and open fully. - Seedless! - An eye-catching specimen with superior habit



Cultural info:		
pH Level:	5.6 - 6.2	
Nutrient Needs:	High	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	High	
Watering:	Average	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	Poly house, no heat (where hardy)	
Sales Window:	Spring-fall (summer bloom)	
Blooms On:	New wood	
Trimming/pruning:	Trim 1-3 times	
Vernalization:	Required	
Vigor Rating:	Average	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	14-16 • 13-15 • 12-14
2 - 3 gallon	4" • QT	20-22 • 18-20

Grower Tips:
<ul style="list-style-type: none"> • Variegated foliage provides season-long appeal compared to other roses of Sharon. • Hibiscus are very heavy feeders and benefit from supplemental foliar feeds. Pale green foliage indicates the need for increased nitrogen – may be difficult to see on this variegated variety. • The Sugar Tip® series naturally takes on an appealing habit - trim as needed to encourage lower branching and to help the plant fill out. • Sugar Tip® Gold is a bit slower in production than Sugar Tip®. • Avoid cutting into thick, woody stems, as doing so will result in a slow recovery. • Allow 8-10 weeks after last trim for flower buds to form if same-season, in-bloom sales are desired. If overwintered before sale, a dormant prune improves shape. • Whiteflies and aphids are most likely pest problems, scout often. • Potting a 2 ¼" liner directly to a 3 gallon is not recommended.
NOTES:

WHITE PILLAR™

Hibiscus syriacus 'Gandini van Aart'

ppaf, cbraf

Common name: rose of Sharon



Landscape Info:	
USDA/AHS zones:	USDA 5/AHS 9
Mature height:	10-16'/3.0-4.8 m
Exposure:	Full sun
Irrigation:	Low to moderate

Features & Benefits:
<ul style="list-style-type: none"> - Fastigate rose of Sharon is the only one of its type. Naturally grows as a narrow column. - Semi-double white flowers. - A space-saving variety is ideally suited to narrow hedges, striking specimens and containers, and flanking entryways.



Cultural info:		
pH Level:	5.6 - 6.2	
Nutrient Needs:	High	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	High	
Watering:	Average	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	Poly house, no heat (where hardy)	
Sales Window:	Spring-fall (summer bloom)	
Blooms On:	New wood	
Trimming/pruning:	Trim 1-3 times	
Vernalization:	Required	
Vigor Rating:	Average-fast	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	12-14 • 11-13 • 10-12
2 - 3 gallon	4" • QT	18-20 • 16-18

Grower Tips:
<ul style="list-style-type: none"> • Hibiscus are very heavy feeders and benefit from supplemental foliar feeds. Pale green foliage indicates the need for increased nitrogen. • Fastigate variety does not branch like conventional rose of Sharon so needs less trimming. Simply trim down top growth a few times to create a dense plant. • Avoid cutting into thick, woody stems, as doing so will result in a slow recovery. • Very narrow habit allows for closer spacing in the nursery. • Allow 8-10 weeks after last trim for flower buds to form if same-season, in-bloom sales are desired. If overwintered before sale, a dormant prune improves shape. • Whiteflies and aphids are most likely pest problems, scout often. • Potting a 2 ¼" liner directly to a 3 gallon is not recommended.
NOTES:

TUFF STUFF AH-HA™

Hydrangea serrata 'SMNHSDD'

ppaf, cbraf

Common name: mountain hydrangea



Landscape Info:	
USDA/AHS zones:	USDA 5/AHS 9
Mature height:	2-3'/.6-.9 m
Exposure:	Part-full sun
Irrigation:	Moderate

Features & Benefits:
<ul style="list-style-type: none"> - Mountain hydrangeas are from a colder area of Japan than their close relatives, big-leaf hydrangeas; they are hardier and bloom more reliably in cold climates. - Blooms prolifically on old and new wood, with handsome dark green foliage. - Double lacecap blooms may be blue or pink.

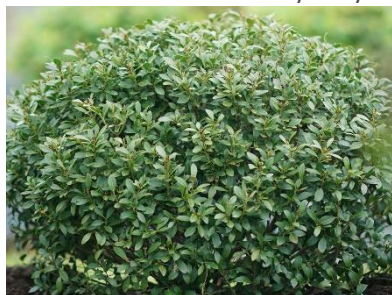


Cultural info:		
pH Level:	5.6 - 6.2	
Nutrient Needs:	Average-high	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	Moderate	
Watering:	Average	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	40 - 50° F/4.4 – 10° C	
Sales Window:	Spring-fall	
Blooms On:	Old and new wood	
Trimming/pruning:	Trim 1-3 times	
Vernalization:	Required	
Vigor Rating:	Average	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	4" • QT	10-12 • 8-10
2 - 3 gallon	4" • QT	16-20 • 14-18

Grower Tips:
<ul style="list-style-type: none"> • Tuff Stuff Ah-Ha™ hydrangea is an extremely prolific bloomer. As such, its most rapid vegetative growth is in spring; by summer, its energies divert into creating flower buds. Little stem and leaf growth is seen in summer, though rooting is strong and continues through the growing season. Plant fills out its container primarily in spring. • Initial bloom will be on previous year's growth; rebloom occurs on new wood approximately 10-12 weeks later. • Trim lightly to shape as many times as possible until late June; Pruning or trimming after this will interfere with bud set for the following season. Dormant or spring pruning will also remove flower buds, though rebloom will still occur later. • May bloom pink or blue, but must be treated for blue flowers. See our reference sheet for instructions. • Less susceptible to powdery mildew and leaf spot than <i>H. macrophylla</i>, but good air circulation and sanitation are still recommended.
NOTES:

STRONGBOX™

Ilex glabra 'Ilexfarrowtracey'
ppaf, cbrf
Common name: inkberry holly



Landscape Info:	
USDA/AHS zones:	USDA 5/AHS 9
Mature height:	2-3'/.6-.9 m
Exposure:	Part-full sun
Irrigation:	Average

Features & Benefits:
<ul style="list-style-type: none"> - Native evergreen substitute for boxwood, naturally growing as a tight, round sphere. - Does not get leggy or bare like other inkberry holly do. - Excellent as a low hedge, foundation plant, accent plant, or formal container. - Deer resistant.



Cultural info:		
pH Level:	5.6 - 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	Moderate to high	
Watering:	Average	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	40 – 50° F/4.4 – 10° C	
Sales Window:	All season (evergreen)	
Blooms On:	Old wood (blooms insignificant)	
Trimming/pruning:	Trim 2-4 times	
Vernalization:	Required	
Vigor Rating:	Average	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	12-14 • 11-13 • 10-12
2 - 3 gallon	4" • QT	18-20 • 16-18

Grower Tips:
<ul style="list-style-type: none"> • Improved production plant over other <i>Ilex glabra</i> – stays fuller, with better leaf retention and a more appealing habit. • Trim to shape as new growth allows – do not cut into thick stems. The plant's natural habit is rounded, and trimming should merely follow this. • Requires acidic growing media. • Potting a 2 ¼" liner directly into a 3 gallon container is not recommended.
NOTES:

SCENTLANDIA™

Itea virginica 'SMNIVDFC'
ppaf, cbraf
Common name: sweetspire



Landscape Info:	
USDA/AHS zones:	USDA 5/AHS 9
Mature height:	2-3'/.6-.9 m
Exposure:	Part-full sun
Irrigation:	Average

Features & Benefits:
<ul style="list-style-type: none"> - Dwarf version of our native sweetspire is ideally sized for residential landscapes. - Exceptional fragrance and fall color, compared to other varieties. - One of the most shade tolerant flowering shrubs.



Cultural info:		
pH Level:	5.6 - 6.2	
Nutrient Needs:	Average to high	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	Moderate to high	
Watering:	Average	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	Polyhouse, no heat (where hardy – see notes)	
Sales Window:	All season (early summer bloom, fall color)	
Blooms On:	Old wood	
Trimming/pruning:	Trim 2-4 times	
Vernalization:	Required	
Vigor Rating:	Average	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	14-16 • 13-15 • 12-14
2 - 3 gallon	2 ¼" • 4" • QT	18-22 • 16-20 • 14-18

Grower Tips:
<ul style="list-style-type: none"> • In colder climates, itea can incur winter damage. Overwinter in a protected area above freezing to minimize. In warmer climates, it may be overwintered in a polyhouse with no heat. • Trim often and keep well-watered and fertilized to encourage it to fill out the container. • Dormant and spring pruning will remove flower buds. Spend the first year trimming to develop the plant, stopping in late July to allow the flower buds to form. Sell the second season. • Do not sell the plant while dormant, especially in cold climates, as there may be some winter kill.
NOTES:

INFINITINI® Purple

Lagerstroemia indica 'G2X13368'

ppaf

Common name: crapemyrtle



Landscape Info:	
USDA/AHS zones:	USDA 6b/AHS 10
Mature height:	3-5'/.9-1.5 m
Exposure:	Full sun
Irrigation:	Average

Features & Benefits:
<ul style="list-style-type: none"> - Dwarf crapemyrtle with purple flowers all summer long. - In USDA zone 6, plants may be killed to the ground, but will regrow and flower the same season. - Low, wide habit lends itself to edging, containers, flower beds, and foundation planting.



Cultural info:		
pH Level:	5.6 - 6.2	
Nutrient Needs:	Average-high	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	High	
Watering:	High	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	40 – 50° F/4.4 – 10° C	
Sales Window:	All season (summer bloom, fall color)	
Blooms On:	New wood	
Trimming/pruning:	Trim 2-4 times	
Vernalization:	Not required	
Vigor Rating:	Fast	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	8-10 • 7-9 • 6-8
2 - 3 gallon	2 ¼" • 4" • QT	14-16 • 12-14 • 10-12

Grower Tips:
<ul style="list-style-type: none"> • Very fast to produce; Infinitini Purple crapemyrtle is a bit larger than others in the series and finishes to a larger plant. • In zone 6, overwinter above freezing. In warmer climates, can be overwintered in a polyhouse with no heat. • Trim often to create a full, dense, rounded container with lots of flowers. Avoid cutting into any thick stems. • Can be cycle-pruned to ship in bloom through the season; allow 6-8 weeks after last trim for flower buds to form. • Highly resistant to powdery mildew, but all cultural methods to avoid it should be implemented (proper spacing, water only in the mornings, provide good air circulation, clean up fallen foliage). • Spider mites may be an issue; scout frequently and minimize heat and drought stress.
NOTES:

INFINITINI® White

Lagerstroemia indica 'G2X13377'

ppaf

Common name: crapemyrtle



Landscape Info:	
USDA/AHS zones:	USDA 6b/AHS 10
Mature height:	3-4'/.9-1.2 m
Exposure:	Full sun
Irrigation:	Average

Features & Benefits:
<ul style="list-style-type: none"> - Dwarf crapemyrtle with white flowers all summer long. - In USDA zone 6, plants may be killed to the ground, but will regrow and flower the same season. - Low, wide habit lends itself to edging, containers, flower beds, and foundation planting.



Cultural info:		
pH Level:	5.6 - 6.2	
Nutrient Needs:	Average-high	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	High	
Watering:	High	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	40 – 50° F/4.4 – 10° C	
Sales Window:	All season (summer bloom, fall color)	
Blooms On:	New wood	
Trimming/pruning:	Trim 2-4 times	
Vernalization:	Not required	
Vigor Rating:	Fast	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	8-10 • 7-9 • 6-8
2 - 3 gallon	2 ¼" • 4" • QT	14-16 • 12-14 • 10-12

Grower Tips:
<ul style="list-style-type: none"> • Very fast to produce. Infinitini White crapemyrtle is a bit larger than others in the series and finishes to a larger plant. • In zone 6, overwinter above freezing. In warmer climates, can be overwintered in a polyhouse with no heat. • Trim often to create a full, dense, rounded container with lots of flowers. Avoid cutting into any thick stems. • Can be cycle-pruned to ship in bloom through the season; allow 6-8 weeks after last trim for flower buds to form. • Highly resistant to powdery mildew, but all cultural methods to avoid it should be implemented (proper spacing, water only in the mornings, provide good air circulation, clean up fallen foliage). • Spider mites may be an issue; scout frequently and minimize heat and drought stress.
NOTES:

JAZZ HANDS NIGHT MOVES™

Loropetalum chinense 'Suzuki'
ppaf

Common name: Chinese fringe-flower



Landscape Info:	
USDA/AHS zones:	USDA 7b/AHS 9
Mature height:	2-4'/.6-1.2 m
Exposure:	Part-full sun
Irrigation:	Average

Features & Benefits:
<ul style="list-style-type: none"> - A true original: loropetalum with purple foliage, white flowers, and splashy variegation in summer. - Excellent color all season; evergreen in warm climates. - Good for hedging, foundation plantings, specimens, and mixed borders.



Cultural info:		
pH Level:	5.6 - 6.2	
Nutrient Needs:	Average to high	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	Moderate to high	
Watering:	Average	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	40 – 50° F/4.4 – 10° C	
Sales Window:	All season (spring bloom, season-long foliage color)	
Blooms On:	Old wood	
Trimming/pruning:	Trim 3-5 times	
Vernalization:	Required	
Vigor Rating:	Average	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	14-18 • 13-17 • 12-16
2 - 3 gallon	2 ½" • 4" • QT	20-24 • 18-22 • 16-20

Grower Tips:
<ul style="list-style-type: none"> • Should not be allowed to freeze if producing in cold climates. • Dormant or spring pruning will remove flower buds. • High fertility ensures best foliage color through hot weather. • Trim frequently to produce a full container, but do not cut into thick, heavy stems. Plant can be a bit slow to branch out, so cut only into soft, herbaceous growth. • Variegation develops later in the season, after flowering. Allow 6-8 weeks after a trim for a new flush of colorful foliage. • Keep plants on the dry side during dormancy. • Requires full sun for best foliage color – if growing in lower light, move to a bright location for a few weeks before sale. • Spider mites can be problematic; scout and treat according to your IPM protocol.
NOTES:

SUMMER WINE® Black

Physocarpus opulifolius 'SMNPMS'

ppaf, cbraf

Common name: ninebark



Landscape Info:	
USDA/AHS zones:	USDA 3/AHS 7
Mature height:	5-6'/1.5-1.8m
Exposure:	Full sun
Irrigation:	Average

Features & Benefits:
<ul style="list-style-type: none"> - The darkest foliage of any ninebark: nearly black, with pink flower clusters in late spring and red seed heads in summer. - Good disease resistance - Native and tolerant of sunny, dry conditions. - Good for landscaping and cut flower production.



Cultural info:		
pH Level:	5.6 – 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	High	
Watering:	Moderate	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	Polyhouse, no heat (where hardy)	
Sales Window:	Spring-fall (late spring bloom)	
Blooms On:	Old wood	
Trimming/pruning:	Trim 2-4 times	
Vernalization:	Required	
Vigor Rating:	Average	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	12-14 • 11-13 • 10-12
2 - 3 gallon	2 ¼" • 4" • QT	18-22 • 16-20 • 14-18

Grower Tips:
<ul style="list-style-type: none"> • Summer Wine Black is a smaller plant than Summer wine, and will finish to a slightly smaller size. To finish to a size comparable to that of Summer Wine, add two weeks to production time. • Blooms on old wood – dormant and spring pruning will remove flower buds. However, as foliage is the main attraction, blooming may not entirely dictate sales season. • Trim 2-4 times the first season to build a good plant body. Stop pruning in late July to allow flower buds to form for sale the following season. Avoid cutting into thick stems. • Somewhat susceptible to spider mites; use cultural controls to minimize, as well as frequent scouting. Treat outbreaks according to your IPM protocol. • This very disease-resistant variety may still get some powdery mildew in production, so use cultural methods to minimize: space plants appropriately, water only in the morning, provide good air circulation, and clean up all fallen leaves. • Avoid drought stress, which encourage powdery mildew and may result in unsightly leaf drop.
NOTES:

HAPPY FACE HEARTS™

Potentilla suffruticosa 'SMNPPS'

ppaf, cbraf

Common name: potentilla



Landscape Info:	
USDA/AHS zones:	USDA 2/AHS 7
Mature height:	1-2'/.3-.6 m
Exposure:	Part-full sun
Irrigation:	Average

Features & Benefits:
- Bright pink flowers with yellow and white centers cover this compact, mounded plant.
- Excellent color retention, even during warm weather.
- Exceptionally hardy and durable.
- Blooms from late spring through frost in cool climates.
- Deer-resistant.



Cultural info:		
pH Level:	5.6 – 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	Moderate-high	
Watering:	Moderate	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	Polyhouse, no heat (where hardy)	
Sales Window:	Spring-fall (blooms all season)	
Blooms On:	Old and new wood	
Trimming/pruning:	Trim 2-4 times	
Vernalization:	Required	
Vigor Rating:	Average to fast	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	10-12 • 9-11 • 8-10
2 - 3 gallon	2 ¼" • 4" • QT	16-20 • 14-18 • 12-16

Grower Tips:
<ul style="list-style-type: none"> • Can be grown much like <i>Spiraea japonica</i>; trim often to form a dense, rounded plant. • Avoid cutting into thick stems – prune to shape only. • First bloom of the season will occur on old wood, so avoid dormant or spring pruning if in-bloom early season shipping is desired. • The plant blooms prolifically on new wood as well. Trimming is not required for continuous bloom to occur, though it will neaten appearance and retail appeal. Allow roughly 8 weeks after a trim for new buds and flowers. • Spider mites can become an issue. Keep cool by providing good air circulation and shade if necessary; avoid water stress.
NOTES:

ZUZU™

Prunus incisa 'Rinpo'

Common name: ornamental cherry



Landscape Info:	
USDA/AHS zones:	USDA 5/AHS 8
Mature height:	3-5'/.9-1.5 m
Exposure:	Part-full sun
Irrigation:	Average

Features & Benefits:
<ul style="list-style-type: none"> - Shrubby ornamental cherry, covered with powder puff pink blooms in spring. - Neat toothed leaves. - Can be grown as a multi-stemmed shrub or a small tree.



Cultural info:		
pH Level:	5.6 – 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	Moderate-high	
Watering:	Low to moderate	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	Polyhouse, no heat (where hardy)	
Sales Window:	Spring best; saleable all season	
Blooms On:	Old wood	
Trimming/pruning:	Trim 1-2 times	
Vernalization:	Required	
Vigor Rating:	Average	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	12-14 • 11-13 • 10-12
2 - 3 gallon	4" • QT	16-20 • 14-18

Grower Tips:
<ul style="list-style-type: none"> • This shrubby cherry finds a natural shape on its own and needs little pruning. • Early spring bloomer – easy to ship in bud and bloom for spring retail sales. • Do not trim or prune after late July to allow flower buds to form for sale the following season. • Avoid cutting into thick woody stems. • Pest-free and largely unbothered by problems that plague other ornamental cherries.
NOTES:

JUKE BOX™

xPyracomeles 'NCXP1' ppaf
Common name: pyracomeles



Landscape Info:	
USDA/AHS zones:	USDA 7/AHS 9
Mature height:	1-3'/.3-.9 m
Exposure:	Part – full sun
Irrigation:	Moderate

Features & Benefits:
<ul style="list-style-type: none"> - Intergeneric hybrid of <i>Pyracantha</i> and <i>Osteomeles</i>; thornless and essentially non-blooming - Evergreen disease-resistant boxwood substitute - Can be shaped as desired - Hardiness is an estimate; has made it through zone 6 winters with some damage. No damage in USDA zone 7.



Cultural info:		
pH Level:	5.6 – 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6-0.9	
Light Level:	Average - high	
Watering:	Average	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	Polyhouse, no heat (where hardy)	
Sales Window:	All season	
Blooms On:	Evergreen	
Trimming/pruning:	Trim 2-3 times	
Vernalization:	Not required	
Vigor Rating:	Average	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	10-12 • 9-11 • 8-10
2 - 3 gallon	4" • QT	14-16 • 12-14

Grower Tips:
<ul style="list-style-type: none"> • A consistent, easy to grow shrubs that's perfectly suited to the landscape market in warm climates. • Grow along with other evergreens, as it thrives in similar conditions. • Prune as new growth allows to build body, definite shape, and manage any occasional wild offshoots. • Avoid cutting into thick, heavy wood – recovery will be slow. • Spider mites may become problematic, particularly if grown in hot, dry conditions. Scout often and treat as your IPM program dictates.
NOTES:

At Last®

Rosa 'HORCOGJIL'

pp#27,541, cbraf

Common name: rose



Landscape Info:	
USDA/AHS zones:	USDA 5/AHS 9
Mature height:	2.5-3'/.76-.9 m
Exposure:	Full sun
Irrigation:	Average

Features & Benefits:
<ul style="list-style-type: none"> - The first disease-resistant landscape rose with old-fashioned flower form and fragrance. - Appealing orange blooms have a very high petal count and true rose fragrance. - Highly disease-resistant deep green foliage. - Ideal for landscaping as well as traditional flower gardens and perennial beds.



Cultural info:		
pH Level:	5.6 - 6.2	
Nutrient Needs:	Average - high	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	High	
Watering:	Average	
Rooting Out Temp:	65 -72°/18.3 – 22.2° C	
Overwintering Temp:	Polyhouse, no heat (where hardy)	
Sales Window:	Spring-fall	
Blooms On:	New wood	
Trimming/pruning:	Trim 3-5 times	
Vernalization:	Beneficial	
Vigor Rating:	Average-fast	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	10-12 • 9-11 • 8-10
2 - 3 gallon	2 ¼" • 4" • QT	16-18 • 14-16 • 12-14

Grower Tips:
<ul style="list-style-type: none"> • All roses benefit from frequent light trimming, which produces an attractive habit and encourages abundant bloom. • Will come out of winter fine in an unheated polyhouse; however, overwintering above freezing will help you ship in-bloom product earlier. • May be cycle-pruned for a continuous supply of in-bloom product to ship; Allow 6-8 weeks after a trim for flower buds to form. Keep well-watered and fertilized. • All Proven Winners roses are disease resistant in the landscape, but normal rose disease prevention methods – avoid overhead watering, clean up debris, etc. – are strongly recommended for the best crop. • Watch for aphids and spider mites.
NOTES:

OSO EASY[®] Double Pink

Rosa 'MEIRIFTDAY'
ppaf, cbrf
Common name: rose



Landscape Info:	
USDA/AHS zones:	USDA 5/AHS 9
Mature height:	1.5-2'/.4-.6 m
Exposure:	Full sun
Irrigation:	Average

Features & Benefits:
- Disease resistant landscape rose is low maintenance and easy to grow.
- Doubled pink flowers are held above the plant body for dramatic presentation.
- Glossy, high quality foliage
- Blooms early summer-fall without deadheading



Cultural info:		
pH Level:	5.6 - 6.2	
Nutrient Needs:	Average-high	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	High	
Watering:	Average	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	Polyhouse, no heat (where hardy)	
Sales Window:	Spring-fall	
Blooms On:	New wood	
Trimming/pruning:	Trim 3-5 times	
Vernalization:	Beneficial	
Vigor Rating:	Average-fast	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	10-12 • 9-11 • 8-10
2 - 3 gallon	2 ¼" • 4" • QT	16-18 • 14-16 • 12-14

Grower Tips:
<ul style="list-style-type: none"> • Oso Easy roses benefit from frequent light trimming, which produces an attractive habit and encourages abundant bloom. • Will come out of winter fine in an unheated polyhouse; however, overwintering above freezing will help you ship in-bloom product earlier. • May be cycle-pruned for a continuous supply of in-bloom product to ship; Allow 6-8 weeks after a trim for flower buds to form. Keep well watered and fertilized. • Oso Easy roses are disease resistant in the landscape, but all normal rose disease prevention methods – avoid overhead watering, clean up debris, etc. – are strongly recommended for the best crop. • Watch for aphids and spider mites.
NOTES:

SUNSAY™

Rosa 'Chewgewest'
ppaf, cbraf
Common name: rose



Landscape Info:	
USDA/AHS zones:	USDA 5/AHS 9
Mature height:	3-4'/.9-1.2 m
Exposure:	Full sun
Irrigation:	Average

Features & Benefits:
<ul style="list-style-type: none"> - Very floriferous landscape rose with doubled blooms of orange and yellow - Deep green disease resistant foliage - Useful shrubby habit, ideal for hedges, specimens, or as a border plant



Cultural info:		
pH Level:	5.6 - 6.2	
Nutrient Needs:	Average - high	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	High	
Watering:	Average	
Rooting Out Temp:	65 -72°/18.3 – 22.2° C	
Overwintering Temp:	Polyhouse, no heat (where hardy)	
Sales Window:	Spring-fall	
Blooms On:	New wood	
Trimming/pruning:	Trim 3-5 times	
Vernalization:	Beneficial	
Vigor Rating:	Average-fast	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	10-12 • 9-11 • 8-10
2 - 3 gallon	2 ¼" • 4" • QT	16-18 • 14-16 • 12-14

Grower Tips:
<ul style="list-style-type: none"> • All roses benefit from frequent light trimming, which produces an attractive habit and encourages abundant bloom. • Will come out of winter fine in an unheated polyhouse; however, overwintering above freezing will help you ship in-bloom product earlier. • May be cycle-pruned for a continuous supply of in-bloom product to ship; Allow 6-8 weeks after a trim for flower buds to form. Keep well-watered and fertilized. • All Proven Winners roses are disease resistant in the landscape, but normal rose disease prevention methods – avoid overhead watering, clean up debris, etc. – are strongly recommended for the best crop. • Watch for aphids and spider mites.
NOTES:

DOUBLE PLAY DOOZIE™

Spiraea x 'NCSX2'

ppaf, cbraf

Common name: spirea



Landscape Info:	
USDA/AHS zones:	USDA 3/AHS 8
Mature height:	2-3'/.6-.9 m
Exposure:	Part-full sun
Irrigation:	Low - moderate

Features & Benefits:
<ul style="list-style-type: none"> - First ever sterile, reblooming spirea! - Late spring flowers emerge deep pink-red with prominent purple stamens. - New growth emerges burgundy red and is especially effective in spring. - Deer resistant and tolerant of many soil types and growing conditions.



Cultural info:		
pH Level:	5.6 - 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	Moderate-high	
Watering:	Average	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	Poly house, no heat	
Sales Window:	Spring-fall	
Blooms On:	New wood	
Trimming/pruning:	Trim 3-5 times	
Vernalization:	Required	
Vigor Rating:	Average-fast	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	8-10 • 7-9 • 6-8
2 - 3 gallon	2 ¼" • 4" • QT	16-18 • 14-16 • 12-14

Grower Tips:
<ul style="list-style-type: none"> • Trim frequently for the first season to produce a well-shaped, nicely branched plant; give it a dormant prune the season before sale. • Trim to shape; avoid pruning into thick stems. • Can be cycle-pruned to ship colorful or in-bloom plants all summer: allow 4-6 weeks after trimming for a fresh flush of colorful foliage, allow 6-8 weeks for flowers. • Aphids may proliferate; scout and treat according to your IPM protocol. • Powdery mildew may develop on foliage if conditions are right. To minimize, space plants appropriately, provide good air circulation, and water only in the mornings.
NOTES:

BLOOMERANG® Dwarf Pink

Syringa 'SMNJRPI'

ppaf, cbraf

Common name: reblooming lilac



Landscape Info:	
USDA/AHS zones:	USDA 3/AHS 7
Mature height:	2.5-3'/.7-.9 m
Exposure:	Full sun
Irrigation:	Average

Features & Benefits:
<ul style="list-style-type: none"> - Improved version of Bloomerang 'Pink Perfume' lilac, more vigorous, better color, fragrance. - Blooms in spring along with other lilacs, then reblooms late summer-fall. - Very disease-resistant; deer resistant as well. - A versatile landscape plant for cooler climates, though it has shown excellent heat performance.



Cultural info:		
pH Level:	5.6 – 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	Moderate-high	
Watering:	Moderate	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	Polyhouse, no heat (where hardy)	
Sales Window:	All season; spring bloom w/summer rebloom	
Blooms On:	Old and new wood	
Trimming/pruning:	Trim 3-4 times	
Vernalization:	Required	
Vigor Rating:	Average	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	12-14 • 11-13 • 10-12
2 - 3 gallon	2 ¼" • 4" • QT	18-22 • 16-20 • 14-18

Grower Tips:
<ul style="list-style-type: none"> • A much better production plant than 'Pink Perfume,' which it replaces. • Easy to ship in bloom for spring sales. • This is a vigorous variety that offers faster and easier production than other lilacs, even in warmer climates. • First and most abundant bloom is on old wood – spring or dormant pruning will remove all these flower buds. Allow 8-10 weeks after a trim for new wood flowers to develop. • Trim frequently during the first season to produce a densely branched, nicely rounded plant. This will result in the best in-bloom presentation the following season. • Though disease-resistant in the landscape, in production it should be closely monitored for various diseases, especially rhizoctonia and phytophthora. See our reference sheet, <u>Control of Common Diseases of <i>Syringa</i></u>, for complete details.
NOTES:

BLOOMERANG® Dwarf Purple

Syringa 'SMNJRPU'

ppaf, cbrf

Common name: reblooming lilac



Landscape Info:

USDA/AHS zones:	USDA 3/AHS 7
Mature height:	2.5-3'/.7-.9 m
Exposure:	Full sun
Irrigation:	Average

Features & Benefits:

- Dwarf version of the original reblooming lilac. Fragrant purple blooms on a small plant.
- Improved production plant.
- Blooms in spring along with other lilacs, then reblooms late summer-fall.
- A versatile landscape plant for cooler climates, though it has shown excellent heat performance as well.

PW
PROVEN
WINNERS®

COLOR CHOICE®
FLOWERING SHRUBS

Cultural info:

pH Level:	5.6 – 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	Moderate-high	
Watering:	Moderate	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	Polyhouse, no heat (where hardy)	
Sales Window:	All season; spring bloom w/summer rebloom	
Blooms On:	Old and new wood	
Trimming/pruning:	Trim 3-4 times	
Vernalization:	Required	
Vigor Rating:	Average	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	12-14 • 11-13 • 10-12
2 - 3 gallon	2 ¼" • 4" • QT	18-22 • 16-20 • 14-18

Grower Tips:

- Easy to ship in bloom for spring sales.
- This is a vigorous variety that offers faster and easier production than other lilacs, even in warmer climates.
- First and most abundant bloom is on old wood – spring or dormant pruning will remove all these flower buds. Allow 8-10 weeks after a trim for new wood flowers to develop.
- Trim frequently during the first season to produce a densely branched, nicely rounded plant. This will result in the best in-bloom presentation the following season.
- Though disease-resistant in the landscape, in production it should be closely monitored for various diseases, especially rhizoctonia and phytophthora. See our reference sheet, [Control of Common Diseases of *Syringa*](#), for complete details.

NOTES:

SCENTARA™ Double Blue

Syringa hyacinthiflora 'SMNSHBBL'

ppaf, cbraf

Common name: lilac



Landscape Info:	
USDA/AHS zones:	USDA 2/AHS 8
Mature height:	6-8'/1.8-2.4 m
Exposure:	Full sun
Irrigation:	Average

Features & Benefits:
<ul style="list-style-type: none"> - Exceptionally fragrant, with blue double flowers - Disease resistant - Attractive rounded growth habit - A versatile landscape plant for cooler climates, though it has shown excellent heat performance as well.



Cultural info:		
pH Level:	5.6 – 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	Moderate-high	
Watering:	Moderate	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	Polyhouse, no heat (where hardy)	
Sales Window:	All season; spring bloom w/summer rebloom	
Blooms On:	Old wood	
Trimming/pruning:	Trim 2-3 times	
Vernalization:	Required	
Vigor Rating:	Average	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	14-16 • 13-15 • 12-14
2 - 3 gallon	4" • QT	18-22 • 16-20

Grower Tips:
<ul style="list-style-type: none"> • Best produced and sold as a 3 gallon – this plant needs a good root system in place before it will bloom well. • Vegetative growth is primarily limited to spring and early summer; starting in late June/early July, energy gets directed toward producing next year's flower buds instead of further leaf, stem, or root growth. • Spring or dormant pruning will remove flower buds. No trimming or pruning should be done past mid-July to allow flower buds to form for the next season. • <i>S. hyacinthiflora</i> in general is quite susceptible to pseudomonas. Protect from frost once new growth has begun, and do not move outdoors or remove poly until temperatures have stabilized in spring. See our reference sheet, Control of Common Diseases of Syringa, for complete details on potential diseases and how to minimize or treat them.
NOTES:

TINY TOT™

Thuja occidentalis 'SMNTOBAB'

ppaf, cbraf

Common name: arborvitae



Landscape Info:	
USDA/AHS zones:	USDA 3/AHS 7
Mature height:	1-2'/.3-.6 m
Exposure:	Part shade-sun
Irrigation:	Average

Features & Benefits:
<ul style="list-style-type: none"> - Dwarf conifer grows as a tight sphere; Improved 'Woodwardii' - Native to North America - Excellent holiday or winter interest for containers or troughs. - Very hardy and durable in the landscape.



Cultural info:		
pH Level:	5.6 – 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	Moderate-high	
Watering:	Moderate	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	Polyhouse, no heat (where hardy)	
Sales Window:	All season - evergreen	
Blooms On:	Conifer, does not bloom	
Trimming/pruning:	Trim 1-2 times	
Vernalization:	Required	
Vigor Rating:	Slow (average for a dwarf conifer)	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	16-20 • 15-19 • 14-18
2 - 3 gallon	1 gal shift	+ 14-18

Grower Tips:
<ul style="list-style-type: none"> • Faster than many other dwarf globe conifers. • Very dwarf evergreen has a long sales window and high retail appeal. Good for shipping with holiday or winter color programs. • Naturally grows as a tight, compact sphere. Trim new growth once or twice to shape, following plant's natural habit. Keep well-watered after trimming to prevent browning of edges. • Do not cut too hard or cut into thick stems, which will result in slow recovery. • Potting any sized liner directly to a 3 gallon is not recommended. Rather, use a 1 gallon shift, adding 14-18 weeks to the time required to produce the 1 gallon.
NOTES:

FLUFFY™

Thuja plicata 'SMNTPGF'

ppaf, cbraf

Common name: Western arborvitae



Landscape Info:	
USDA/AHS zones:	USDA 5/AHS 8
Mature height:	5-10'/1.5-3.0
Exposure:	Part – full sun
Irrigation:	Average

Features & Benefits:
<ul style="list-style-type: none"> - Boldy textured foliage glows gold all year round. - Hardy and resistant to burn in summer or winter. - Native to North America. - Naturally takes on a tight pyramidal shape without pruning.



Cultural info:		
pH Level:	5.6 – 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	Moderate-high	
Watering:	Moderate	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	Polyhouse, no heat (where hardy)	
Sales Window:	All season - evergreen	
Blooms On:	Conifer, does not bloom	
Trimming/pruning:	Trim 2-3 times	
Vernalization:	Required	
Vigor Rating:	Average	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	12-14 • 11-13 • 10-12
2 - 3 gallon	1 gal shift	+ 14-18

Grower Tips:
<ul style="list-style-type: none"> • Colorful, strikingly pyramidal arborvitae offers a long sales window and high retail appeal. • Trim/shear new growth 2-3 times to produce a full-bodied plant. Keep well-watered after trimming to prevent browning of edges. • Do not trim too hard or trim into thick stems, which will result in slow recovery. • Following same protocol you use to grow 'Emerald Green' arborvitae will give you excellent results, though Fluffy is a smaller, more densely branched plant. • Potting any sized liner directly to a 3 gallon is not recommended. Rather, use a 1 gallon shift, adding 14-18 weeks to the time required to produce the 1 gallon.
NOTES:

SNIPPET™ Dark Pink

Weigela florida 'VUKOZLyra'
ppaf, cbraf

Common name: reblooming weigela



Landscape Info:	
USDA/AHS zones:	USDA 4/AHS 8
Mature height:	1-2'/.3-.6 m
Exposure:	Full sun
Irrigation:	Moderate

Features & Benefits:
<ul style="list-style-type: none"> - Dwarf reblooming weigela. - Very appealing pink flowers bloom for months on a tidy, rounded plant. - Naturally grows with a neat mounded shape. - Very deer resistant. - Blooms for months every year.



Cultural info:		
pH Level:	5.6 - 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	Moderate to high	
Watering:	Average	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	Polyhouse - no heat (where hardy)	
Sales Window:	Spring-fall (late spring/early summer bloom)	
Blooms On:	Old wood	
Trimming/pruning:	Trim 2-4 times (or as needed)	
Vernalization:	Required	
Vigor Rating:	Fast	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	8-10 • 7-9 • 6-8
2 - 3 gallon	2 ¼" • 4" • QT	16-18 • 14-16 • 12-14

Grower Tips:
<ul style="list-style-type: none"> • Due to its propensity to rebloom, this variety can be cycle-pruned to ship blooming product from spring through fall. • Spring and dormant pruning will remove buds for main bloom. • Trim to shape frequently to produce a dense, compact plant that has longer retail appeal. Stop trimming in late July to allow flower buds to form for sale the following season. • Allow 8-10 weeks for new flower buds to form after a trim. • Spider mites may become an issue; scout and treat as your IPM program dictates.
NOTES:

SNIPPET LIME™

Weigela florida 'VUKOZ047213'

ppaf, cbraf

Common name: reblooming weigela



Landscape Info:	
USDA/AHS zone:	USDA 4/AHS 8
Mature height:	1-2'/.3-.6 m
Exposure:	Full sun
Irrigation:	Moderate

Features & Benefits:
<ul style="list-style-type: none"> - Dwarf reblooming weigela. - Bright pink flowers are set off by chartreuse colored foliage. - Naturally grows with a neat mounded shape. - Very deer resistant. - Blooms for months every year.



Cultural info:		
pH Level:	5.6 - 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	Moderate	
Watering:	Average	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	Polyhouse - no heat (where hardy)	
Sales Window:	Spring-fall (late spring/early summer bloom)	
Blooms On:	Old wood	
Trimming/pruning:	Trim 2-4 times (or as needed)	
Vernalization:	Required	
Vigor Rating:	Fast	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	8-10 • 7-9 • 6-8
2 - 3 gallon	2 ¼" • 4" • QT	16-18 • 14-16 • 12-14

Grower Tips:
<ul style="list-style-type: none"> • Due to its propensity to rebloom, this variety can be cycle-pruned to ship blooming product from spring through fall. • Spring and dormant pruning will remove buds for main bloom. • Trim to shape frequently to produce a dense, compact plant that has longer retail appeal. Stop trimming in late July to allow flower buds to form for sale the following season. • Allow 8-10 weeks for new flower buds to form after a trim. • Spider mites may become an issue; scout and treat as your IPM program dictates.
NOTES:

SONIC BLOOM[®] Pure Pink

Weigela florida 'SMNWFRP'

ppaf, cbraf

Common name: reblooming weigela



Landscape Info:	
USDA/AHS zones:	USDA 4/AHS 8
Mature height:	3-5'/.9-1.5 m
Exposure:	Full sun
Irrigation:	Moderate

Features & Benefits:
- Reblooming weigela blooms in late spring with other weigela then reblooms through summer.
- True pink flowers with a deep pink throat over months each year.
- Deer resistant and trouble-free; deadheading not required.
- Good for hedges, mixed borders, foundation planting.



Cultural info:		
pH Level:	5.6 - 6.2	
Nutrient Needs:	Average	
EC (2:1 extract):	0.6 – 0.9	
Light Level:	Moderate to high	
Watering:	Average	
Rooting Out Temp:	65 – 72° F/18.3 – 22.2° C	
Overwintering Temp:	Polyhouse - no heat (where hardy)	
Sales Window:	Spring-fall	
Blooms On:	Old and new wood	
Trimming/pruning:	Trim 2-4 times	
Vernalization:	Required	
Vigor Rating:	Fast	
Finish Size	Liner Size	Weeks of Active Growth to Finish
1 gallon	2 ¼" • 4" • QT	8-10 • 7-9 • 6-8
2 - 3 gallon	2 ¼" • 4" • QT	16-18 • 14-16 • 12-14

Grower Tips:
<ul style="list-style-type: none"> • The most vigorous of the Sonic Bloom series; develops a more upright habit over time. • Trim to shape frequently to produce a dense, compact plant that has longer retail appeal. • Spring and dormant pruning will remove the first set of flower buds. Stop pruning in late July to allow spring flower buds to form for sale the following season. • Will rebloom later in the season for same-season sales; allow 8-10 weeks after final trim for new wood flower buds to form. Keep well fertilized for best rebloom. • Spider mites may become an issue; scout and treat as your IPM program dictates.
NOTES: