

Perennial Grasses

ZONE HARDINESS

4 – 9 Karl Foerster and Overdam *Calamagrostis*, Elijah Blue *Festuca*, 'Cheyenne Sky' *Panicum*

5 – 9 Ogon *Acorus*, Graceful Grasses® Blue Mohawk® and *Spiralis Juncus*, 'Desert Plains' *Pennisetum*

NUTRITION

pH: 5.8 – 6.5

EC: (2:1 extraction method) 0.9 – 1.5

Moderate fertilization is recommended. 100ppm – 200 ppm N

TEMPERATURE for forcing from a liner

Forcing/Growing on: 60 F Night – 65 F Day

Holding: 40 F Night – 50 F Day

Plants can be moved outside once the crop has reached a saleable size and the danger of frost has passed. An open environment will often strengthen the stems and produce a better finished product. 'Cheyenne Sky' and 'Desert Plains' need more heat and should be grown at 68 F – 72 F temperatures for the entire growing cycle.

WATERING

Grow plants on the dry side during the start of forcing to encourage root development and discourage root rot, but do not allow plants to wilt. Keep the soil evenly moist. Ogon, Blue Mohawk and *Spiralis* are water or bog plants and enjoy more of a moist to wet growing conditions. 'Cheyenne Sky' is a prairie grass and enjoys drier conditions.

TIMING

Supernova® 28 Liner (if applicable) to Trade Gallon/

True Gallon: 8 – 12 weeks with one plug per container. A typical planting date for spring forcing would be Week 8 for finishing in Week 18. Root development in *Panicum* (as well as proper vegetative growth) requires long days. Forcing 1 gallon containers in the spring from liners doesn't produce as high of a quality finished product as does the typical summer/fall bulk and vernalization model.

50/84 Liner to Quart: For spring growing, allow 8 – 10 weeks with one plug per container. A typical planting date for spring

forcing would be Week 10 for finishing in Week 18. Root development in *Panicum* (as well as proper vegetative growth) requires long days. Forcing quarts in the spring from liners doesn't produce as high of a quality finished product as does the typical summer bulk and vernalization model. Additionally, if finishing Standard 50 liners into a Trade or True gallon is desired on slower growing perennial grasses such as *Festuca*, *Panicum* and *Acorus*, it's best to do a summer planting and plan on an entire growing season for proper bulking and vernalization for sales the following spring.

VERNALIZATION

No vernalization should be needed because perennial grasses are not normally grown for flowers. *Calamagrostis* is the one exception and they are sold with the appropriate amount of vernalization for spring flowering. *Panicum* and *Pennisetum* also do not require vernalization when sold as a foliage item; however, our liners will be sold vernalized for proper summer flowering.

PLANTING

Liners should always be planted even to the soil line of the plug. *Calamagrostis*, *Panicum* and *Pennisetum* are shipped semi-dormant and may appear to be dead at the time of arrival. Hold these liners in a cold house until it's time to plant: 35 F – 44 F degrees for this is adequate. Letting most of these perennial grasses sit out on warm greenhouse benches for a prolonged period of time can allow them to start to break dormancy and can later adversely affect the finished look of the product.

When growing perennial grasses, we recommend using an aged or composted pine bark based media, as opposed to annual growing mixes that traditionally tend to be heavier in peat. Bark adds weight and stability to the growing mix and tends not to compress and shrink over time, thus adding the longevity that can be needed on long-term crops such as perennials. If you're planning to grow and sell these in a very short amount of time, this is less of an issue. It is also less of an issue with the water grasses such as *Acorus* and *Juncus*, as these enjoy more of a moist growing condition. A peat-based media can assist in providing that.



LIGHT/LIGHTING

During forcing, plants should be given as much light as possible. Plants should be spaced such that they do not shade each other. *Panicum* and *Pennisetum* should be grown under long days in the spring to assist in proper growth. Plants grown under short days will be very slow to finish and can stall out.

Shading of *Acorus* in the brighter warmer summer months is beneficial in keeping the nice gold coloration.

TRIMMING/PINCHING

Trimming should be avoided on grasses unless you are finishing out the season and wish to carry over plants to the next growing season. Once trimmed, they will always have the old trimmed leaves in place and this will adversely affect the look on the retail bench. Grow these in the proper environment and trimming should not be needed. For example, growing *Calamagrostis* in a warm poly house in the early spring will just promote tall, leggy flower growth that will spoil the retail appeal this grass has to offer. *Calamagrostis*, *Panicum* and *Pennisetum* can be cut half-way back in the spring for reflushing in the fall.

GROWTH REGULATORS

Unless otherwise noted below, growth regulators are generally not needed on these perennial grasses. Use the proper growing environments to ensure proper growth.

A 5ppm Bonzi® (paclobutrazol) drench or a 1ppm Sumagic® (uniconazole) drench can be used on 'Cheyenne Sky.' A 10ppm Bonzi drench or a 2ppm Sumagic drench can be used on 'Desert Plains.'

PEST and DISEASE MANAGEMENT

Bird Cherry Oat Aphids can be a problem on grasses. Spider Mites can become a serious pest on Ogon. Scout also for Japanese Beetles, Spittlebugs, Thrips and Whiteflies.

Watch for crown and stem rots as well as Leaf Spots and Rust.

Weeding may be needed on occasion in order to grow these crops long term.

We recommend implementing a good IPM program as well as early releases of biological control to help aid in the control of insect and disease problems.

OTHER TIPS

If a larger size is desired, follow the same culture as above, but plant using three plants per pot Supernova® 28 liners, or plant up crops using the previous season's 1 gallon containers.

Panicum may need drench applications of Iron to maintain green foliage color.

When using perennial grasses in upright combinations, it may be beneficial to plant plugs in quarts and plant these into the combo at a later date, so the finished date of the combination is better matched with the finish time of the grass.



The rates and chemicals listed are based on our southeast Michigan growing conditions, and are not recommended for nationwide application. Please adjust the rates and spray applications to your location and facility.