

PRODUCTION TIPS

PERENNIALS



'Luna Pink Swirl'



'Cherry Brandy'

Production Tips for Top Performers

Hibiscus moscheutos

Researchers from the Floriculture Program at the University of Florida (UF) and Michigan State University (MSU) share research-based information on some of the top perennial performers from the past few years.

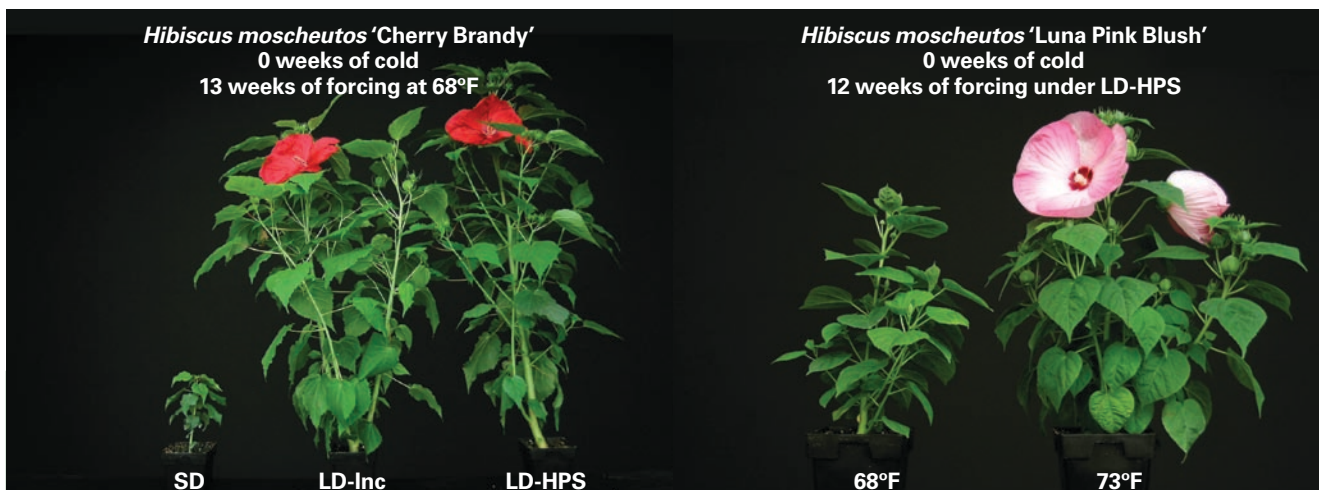
by CATHY WHITMAN and SONALI PADHYE

HIBISCUSES are one of the most showy and popular tropical plants. The genus contains more than 200 species that are native to temperate, subtropical or tropical regions of the world. Many are valuable ornamentals that add a spectacular exotic flair

to gardens. For that tropical feel in a northern location, the tender species are wonderful in containers. Northern gardeners also have a hardy option: swamp rose mallow or *H. moscheutos* is native to southern and eastern North America and is cold-hardy to Zone 5. Like their tropical cousins, *H. moscheutos* sports huge flowers in shades of pink, red or white that can be over 9

inches in diameter. The flower power of the enormous blooms is irresistible.

H. moscheutos will tolerate wetness and does best in consistently moist soil. They prefer sun to part shade. Plants die down to the ground each winter and are very late to emerge in the spring, so advise customers to be patient! This species can reach 8 feet in height but numerous cultivars and



Hibiscus moscheutos 'Cherry Brandy'
0 weeks of cold
13 weeks of forcing at 68°F

SD

LD-Inc

LD-HPS

Hibiscus moscheutos 'Luna Pink Swirl'
0 weeks of cold
12 weeks of forcing under LD-HPS

68°F

73°F

Figure 1. Hibiscus 'Cherry Brandy' grown under short days, long days provided with incandescent lamps, or long days provided with high-pressure sodium lamps. No plants of this cultivar flowered under short days.

Figure 2. Hibiscus 'Luna Pink Swirl' grown under 16-hour long days at 68°F or 73°F. The 5°F increase in temperature resulted in improved growth in this heat-loving species, and hastened flowering by more than two weeks.

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hybrids are available, with improved branching, compact habit and variations in foliage shape and color.

Materials and Methods

We have worked with two cultivars in recent years. 'Luna Pink Swirl' is a seed-propagated variety with a height of 2 to 3 feet. 'Cherry Brandy' is vegetatively propagated, has bronze foliage with incised margins and reaches a height of 3 to 4 feet. Our starting material for 'Luna Pink Swirl' was 128-cell plugs and for 'Cherry Brandy,' we received 72-cell plugs that had been pinched to three to five nodes before arrival.

Plugs were transplanted into 5½-inch pots and forced at 68°F under three different photoperiod conditions: nine-hour short days, 16-hour long days provided by incandescent lamps or a higher-light treatment of 16-hour long days provided with high-pressure sodium (HPS) lamps. In the higher-light treatment, plants received about 25 percent more total light per day than in the other two treatments. We also forced a few 'Luna Pink Swirl' at 73°F under long days provided with HPS lamps and placed plugs of 'Luna Pink Swirl' in a cooler at 41°F for a cold treatment.

Results

Previous experiments found that mature crowns of *H. moscheutos* can be cold stored, but small plugs do not tolerate cold temperatures. 'Luna Pink Swirl' confirmed this, and all plugs we placed in the cooler died. No cold is needed for flowering.

Long days are required for flowering of these hibiscuses. No 'Cherry Brandy' plants flowered under short days. Under long days, time to flower was 12 to 13 weeks after transplant. 'Luna Pink Swirl' did eventually flower under short days, but forcing them under long days hastened flowering by more than four weeks and they formed far more buds under long days. Time to flower for our 'Luna Pink Swirl' was 14 to 15 weeks under long days.

Plants in our higher-light treatment formed twice as many flower buds as those under incandescent lamps, had improved branching and looked more vigorous. The number of flower buds that were visible when the first flower opened were 45 to 55 per plant under

high-light conditions.

Warm temperatures are key to success with hibiscus. Our forcing temperature of 68°F is close to the minimum temperature that will give good results. The 'Luna Pink Swirl' we forced at 73°F instead of 68°F thrived. The increase of 5°F made a marked improvement in performance (Figure 2) and hastened flowering by more than two weeks.

Height Control

Our 'Cherry Brandy' plants were 37 to 46 inches tall when they began blooming, while 'Luna Pink Swirl' was 16 to 22 inches. We have not tested growth regulators on these cultivars, but a previous trial on two other varieties in the Luna series found that spray applications of paclobutrazol, uniconazole or chlormequat were effective for height control. Growers will need to finetune application rates and frequencies to fit their particular situation, and they may not need growth regulators at all on compact varieties like 'Luna Pink Swirl'.

Production Notes

Leaves on our 'Cherry Brandy' plants appeared green, not bronze. The dark coloration in bronze or purple foliage is created by plant pigments called anthocyanins. Plants must be exposed to high light levels before they can form the anthocyanins, and light levels in greenhouses are generally not high enough for this process to occur. The dark coloration of dark-leaved varieties will develop rapidly once they're placed outdoors.

Each flower lasts only one day, but these hibiscuses produce so many large flowers that they are attractive for a long time. Whether they're used as specimen plants, container gardens or a colorful hedge, they will bring a cheerful touch of the tropics to any garden. **GG**

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