

Verbena: A Garden Gem

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The first verbena to win an All-America Selections award was Beauty of Oxford Hybrids from Waller-Franklin Seed in 1933 (left). The original Quartz Burgundy from PanAmerican Seed won in 1999. Another interesting note: Waller-Franklin, which eventually became Waller Genetics, Inc., was integrated into PanAmerican Seed in 2001.

In 1999, Verbena Quartz Burgundy was a bedding plant award winner due to its improved mildew tolerance. Because of this performance against disease, gardeners could enjoy its deep, wine-red flowers much longer. Verbena creates an attractive, slightly spreading, mounded plant with huge umbels of large florets over dark green foliage. It makes brilliant containers, beds and hanging baskets where it can trail over the edge of the container.

Currently upgraded by breeder PanAmerican Seed to the Quartz XP series, it offers growers a well-matched crop for early flowering and is significantly improved for branched habit.

Plug production

Moisture management is the key to successful verbena germination. It does best under medium-dry (level 2) to medium (level 3) plug media moisture levels. Too wet conditions may decrease germination performance. Set temperature at 72F to 75F (22C to 24C) with no light required. Humidity should be 95% to 97%.

Temperatures From 10 to 14 days after sowing, day air temperatures can be set at 70F to 72F (21C to 22C) and the night temperature at approximately 60F (15C).

Light Adjust lighting up to 2,500 f.c. (26,900 Lux).

Humidity Once plug trays come out of the germination chamber, grow them under medium-wet (level 4) moisture conditions. Avoid wet moisture conditions until the seedlings establish.

Fertilizer Apply feed at rate 1 (less than 100 ppm N/less than 0.7 mS/cm EC) with a nitrate-form fertilizer with low phosphorous. Maintain a media pH of 5.8 to 6.2 and EC at 0.5 to 0.7 mS/cm (1:2 extraction).

The day air temperatures in stage 3 and 4 can be set at 68F to 70F (20C to 21C) and the night temperature at approximately 60F (15C). Increase the fertilizer rate to 2 (100 to 175 ppm N/ 0.7 to 1.2 mS/cm EC). Maintain a media pH of 5.8 to 6.2 and EC at 0.7 to 1.0 mS/cm (1:2 extraction). Light levels can be increased in stage 4 up to 5,000 f.c. (53,800 Lux) if temperatures can be maintained.

Diseases Check for powdery mildew from this stage onwards.

Growth Regulators If plant growth regulator treatments are necessary for holding/toning the plugs, apply A-Rest (ancymidol) at 10 ppm (37.6ml/l, 0.0264% formulation) as a foliar spray.

Growing on to finish

Verbena can finish in 606-cell packs using a well-drained, disease-free soilless medium with a pH of 5.5 to 6.2 and a medium initial nutrient charge. Maintain day temperatures at 65F to 70F (18C to 21C) and night temperatures at about 60F (15C) until finish. Verbena can be grown as low as 55F (13C), but the crop time will be longer. Keep light levels as high as possible while maintaining appropriate temperatures, while avoiding high humidity in the growing environment as this can induce powdery mildew.

Starting a week after transplant, apply fertilizer at rate 3 (175 to 225 ppm N/1.2 to 1.5 mS/cm), using predominantly nitrate-form fertilizer with low phosphorus. If needed, a balanced ammonium and nitrate-form fertilizer may be used as needed to encourage growth and balance the media pH.

Use two applications of A-Rest (ancymidol) at 20 ppm (75ml/l, 0.0264% formulation) as a foliar spray. One application can be done 1 week after transplant, and the second application can be done 10 to 14 days later.

Crop scheduling

Total crop time in spring: 10 to 12 weeks for XP, 11 to 13 weeks for original

Total crop time in summer: 9 to 11 weeks for XP, 10 to 12 weeks for original

Sow to transplant (392-cell plug), Quartz XP varieties take approximately 4 weeks. Quartz original varieties take approximately 5 weeks.
Transplant to flower in 606-cell packs (1 plant per cell) is 6 to 8 weeks. **GT**

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