

Cultural Information for: Gomphrena Pinball™ Annual
Common Name: Globe Amaranth
Botanical Name: Gomphrena hybrid
Optimum Growing Temperature: 70-75°F / 21-24°C

Propagation: 4 weeks

Tray: 98 cell density. 1 cutting per cell.

Media: Select a well-aerated sterile media or inorganic material. Foam, coarse peat, rockwool and media blends with 30-40% aggregate are all good choices. Avoid mixes that hold excessive moisture. EC should be < 0.1 mmhos (2:1 dilution) (because fertilizer is not necessary for rooting and high EC tends to cause root burning) and the pH 5.8-6.2.

Light: Target 2,000 foot candles/22,000 lux.

Bottom Heat: Although not necessary, bottom heat accelerates root development. Target 70-75°F/21-24°C and ideally use tempered water in the mist lines to avoid overcooling the root zone.

Rooting Hormone: Not necessary, but it does promote uniformity. Choose a powder or liquid containing up to 3,000 ppm IBA.

Misting: Mist is less needed to root Gomphrena as it has a thick leaf and over misting promotes disease/rotting. Applying an adjuvant, such as CapSil, reduces surface tension keeping the leaves wetter longer. Mist more frequently for the first 7 days and then reduce once callus forms. Occasional misting may be needed at night in areas of high heat or when using bottom heating.

Fertilizer: When root starts to elongate, apply liquid fertilizer at 100 ppm Nitrogen and target a media EC of 0.3-0.4 mmhos.

Finished Production:

Potting: Gomphrena is suited for production in many sized containers and hanging baskets. Being drought tolerant, it is ideal for consumers who spend weekends away from home.

Media: Select a sterile, well-aerated mix with 5-15% porosity. EC < 0.75 mmhos (2:1 dilution). The optimum pH range is 5.8 to 6.2.

Pinching: Gomphrena Pinball tends to self-branch and pinching is primarily needed to shape the plant. Pinch taller stems to promote uniformity and fuller plants.

Irrigation/Fertilization: Avoid excessive irrigation throughout production. Commence fertilizing 2 weeks after transplant with a complete, balanced fertilizer at 150-200 ppm N (constant liquid feed). Maintain the media pH at 5.8-6.2 and target the EC level at 1.0 mmhos (2:1 dilution). A slow release fertilizer is an option; especially for outdoor production where heavy summer rains are common. In addition, a slow release may provide improved performance for the consumer. Flush with fresh water if excess soluble salts accumulate.

Temperature/Humidity: Establish the crop at an average daily temperature of 65°F/18°C. Once established, grow at 70-75°F/21-24°C days and 65°F/18°C at night. Provide good air circulation and a relative humidity below 70% to prevent Botrytis (gray mold).

Light: Bright light is ideal for this crop. For best results initially provide 3,500-5,000 foot candles/38,000-54,000. Gomphrena will tolerate full sun conditions once established.

Spacing: Gomphrena Pinball features a mounding habit that provides excellent retail presentation and strong shelf life. While initial planting should be pot tight, consider spacing pots during the final two weeks of production for optimum finish quality.

Container	Spacing
4 inch/10 cm.	6 inch/15 cm. on center
6 inch/15 cm.	12 inch/30 cm. on center
8 inch/20 cm.	16 inch/40 cm. on center

Plant Growth Regulators (PGRs): Plant growth regulators should not be necessary with adequate light levels. If necessary, applying B-Nine® (daminozide) at 1,500 – 2,500 ppm or Cycocel® (chlormequat) at 1,000 – 1,500 ppm is an option to control plant height and/or help tone the plants.

Insects: No serious pests or diseases.

Disease: Botrytis (gray mold), root and stem rot. Mildew may attack drought stressed plants.

Crop Scheduling:

Container Size	Cuttings/Pot	Total crop time*
4 inch/10 cm.	1	8-10 weeks
5 inch/12 cm.	1-2	10-12 weeks
6 inch/15 cm.	2-3	9-12 weeks
8 inch/20 cm.	3	10-12 weeks
10 in./25 cm. basket	4-5	12-14 weeks
12 in/30 cm. basket	5	14-16 weeks

**includes 4 weeks of rooting time*

Consumer Culture: Gomphrena is both heat and drought tolerant and requires minimal care. In general it grows 14-18 inches/35-45 cm. tall and wide in the garden, depending on the length of the growing season.

“All information given is intended for general guidance only and may have to be adjusted to meet individual needs. Cultural details are based on North American conditions and Sakata cannot be held responsible for any crop damage related to the information given herein. Application of recommended growth regulators and chemicals are subject to local and state regulations. Always follow manufacturer’s label instructions. Testing a few plants prior to treating the entire crop is best.”