

**Cultural Information for:** Gomphrena Pinball™ Annual  
**Common Name:** Globe Amaranth  
**Botanical Name:** Gomphrena hybrid  
**Optimum Rooting Temperature:** 70-75 °F / 21-24°C  
**Optimum Growing Temperature:** 65-75 °F / 18-24°C  
**Optimum pH:** 5.8 – 6.2  
**EC – Liner:** 0.26 – 0.75 mmhos/cm (1:2) / 0.76 – 2.0 (SME)  
**EC – Finishing:** 0.76 – 1.25 mmhos/cm (1:2) / 2.1 – 3.5 (SME)

**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 retain excessive moisture.

**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 excess 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 a 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 N.

**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.

**Pinching:** Gomphrena Pinball self-branches so pinch taller stems to shape the plant and promote uniformity and fuller plants. an

**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). 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. Initially keep pot tight, and then space 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.

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 inch/25 cm. basket	4-5	12-14 weeks
12 inch/30 cm. basket	5	14-16 weeks

**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.”*