

Gaillardia Barbican™



Culture Guide

Botanical name: *Gaillardia aristata*

Product form: Vegetative

Containers: Gallons

Habit: Mounding

Vernalization: Not required (First Year Flowering)

Garden Specifications

Garden Height: 14–16" (35–40cm) tall

Garden Width: 14–18" (35–45cm) wide

Exposure: Full sun

USDA zone: 4–9

AHS zone: 12–1

Product use: Containers, Landscapes

Propagation of Unrooted Cuttings

Root emergence: 6–8 days

Rooting hormone: Not recommended

Bottom heat temp.: 72–75 °F (22–24 °C) for the first three weeks. After roots are well developed, temperatures can be lowered to hold and tone the cuttings.

Misting: Mist schedules vary depending on light and temperature conditions. Apply just enough moisture to rehydrate the cuttings and keep them from wilting. Cuttings should be hydrated and in a non-wilted stage within 24 hours after sticking. Cuttings that continue to wilt heavily after 24 hours will callus unevenly and will be delayed in rooting. CapSil® (spray adjuvant) can be sprayed on the cuttings at a rate of 2–4 oz/100 gal within 1–2 days after sticking to help in rehydration of the cuttings. Misting should be significantly reduced after 3–4 days and after cuttings become fully hydrated.

Rec. tray size: 105-cell (30 mm) or larger

Propagation timing: 4–5 weeks for a 105-cell plug; add more rooting time for significantly larger plug sizes.

Temperature

Day: 70–72 °F (21–22 °C)

Night: 70–72 °F (21–22 °C)

Lighting

Day extension lighting: Beneficial to 14 hours

Light intensity: 200–250 $\mu\text{mol}\cdot\text{m}^{-2}\cdot\text{s}^{-1}$ for the first two weeks after sticking or until root development occurs. Light levels can be increased up to 600 $\mu\text{mol}\cdot\text{m}^{-2}\cdot\text{s}^{-1}$ as rooting increases and the cutting matures.

Day length response: Obligate long day



Barbican™ Yellow Red Ring

Daily light integral: 4–6 $\text{mol}\cdot\text{m}^{-2}\cdot\text{d}^{-1}$ for the first two weeks after sticking or until root development occurs. DLI can be increased to greater than 12 $\text{mol}\cdot\text{m}^{-2}\cdot\text{d}^{-1}$ after root formation.

Media pH: 5.6–6.0

Media EC: SME EC: 0.9–1.3 mS/cm, PourThru EC: 1.4–2.0 mS/cm

Fertilizer: Begin fertilization at 80 ppm nitrogen when roots become visible. Rates can be increased up to 150 ppm nitrogen after roots become well developed. Use primarily Cal-Mag® Plus (calcium nitrate + magnesium nitrate + iron) fertilizers in propagation to prevent unwanted stretch.

Pinching: Not recommended

Plant growth regulators (PGRs): If necessary, a B-Nine® WSG spray at 2,500–5,000 ppm can be used.

Bulking and Vernalization

Vernalization: Not required (First Year Flowering)

Finishing

Temperature

Day: 76–78 °F (24–26 °C)

Night: 64–66 °F (18–19 °C)

Average daily temperature: 70 °F (21 °C)

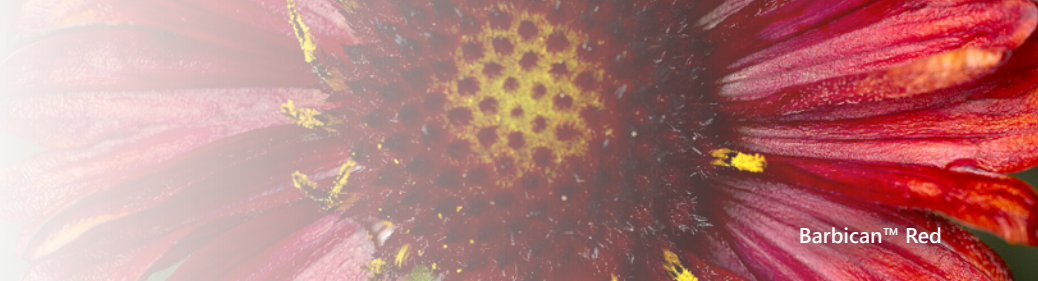
Lighting

Day extension lighting: Beneficial to 14 hours

Light intensity: 800–1,200 $\mu\text{mol}\cdot\text{m}^{-2}\cdot\text{s}^{-1}$

Day length response: Obligate long day

Daily light integral: 14–16 $\text{mol}\cdot\text{m}^{-2}\cdot\text{d}^{-1}$



Barbican™ Red

Transplanting: Transplant directly into the finished container. Place the rooting media slightly above the level of media in the container. Make sure that the root ball is covered and that the plug is situated in the center of the pot.

Media pH: 5.8–6.2

Media EC: SME EC: 1.5–2.1 mS/cm, PourThru EC: 2.3–3.2 mS/cm

Fertilizer: 125–175 ppm N

Pinching: No. Pinching is not recommended or needed.

Plant growth regulators (PGRs): If needed, spray B-Nine® WSG at 2,500–5,000 ppm, or Bonzi® at 10–15 ppm.

Tech tip: Grows best under high light and long day conditions. Gaillardia does not tolerate wet growing conditions.



Try Chrysal Alesco®, a postharvest foliar spray, to protect ethylene sensitive crops during shipping and retail.

Moisture level: Media should be allowed to dry between irrigations. Alternate between moisture level 2 and 4.

2 - MEDIUM: Soil is light brown in color, no water can be extracted from soil, and soil will crumble apart.

4 - WET: Soil is dark brown but not shiny, no free water is seen at the surface of the soil, when pressed or squeezed water drips easily, and trays are heavy with a visible bend in the middle.

Common pests: Aphids, Spider Mites, Thrips

Common diseases: Botrytis, Pythium

Scheduling

Size	Crop Time	Plants Per Pot
1.0 quart (4.5 to 5 inch)	9–10 weeks	1 ppp
1.25 to 2.5 quart (5.5 to 6.5 inch, trade gallon)	9–10 weeks	1–2 ppp
3.0 quart to 2.0 gallon (7.5 to 10 inch)	9–10 weeks	3 ppp

Estimated finish crop time is from transplant of a 105-cell tray and finished at an average daily temperature (ADT) of 70 °F (21 °C).

Example crop schedule for a 2.5 quart

Weeks From Transplant	Description
1 week	Pinch out premature buds if present prior to transplanting
5 weeks	Apply Bonzi® at 10–15 ppm or B-Nine® WSG at 2,500–3,500 ppm if needed to tone
9 weeks	Finish



Barbican™ Yellow Red Ring