Gaillardia x grandiflora

Arizona

First Gaillardia Series from Seed



- FastraX perennial: First year flowering without vernalization
- Well-branched and uniform plant habit
- Long flowering period
- Thrives under a wide range of climatic conditions
- Attracts bees and other pollinators

Crop Time	Spring: 17 - 22 weeks
Height ⌀	12 " / 30 cm
Width ⌀	14 " / 35 cm
Exposure	Sun
Seed Form	BeGreen Coating
Heat Zone	12-1
Hardiness Zone	3a-9b
Product Use	Pots, Mixed Containers, Bedding, Landscape
Family, Origin	Asteraceae, North America
Minimum Germ. Rate	85 %

TECHNICAL GUIDE

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Flowering

Flowering Type: FastraX perennial – first year flowering plants without vernalization. Facultative long day plant. Long days above 13 hours and high irradiance will promote flowering.

Flowering Mechanism: Flowering is affected by day length. A day length >13 hours will result in flower initiation. High light intensity and warmer temperatures shorten the total crop time.

Plug Culture

Germination: Optimum conditions for seedling development, beginning on the day of sowing until radicle emergence. Expect radicle emergence in 7-10 days.

Cover: Cover the seeds lightly.

Sowing method: 1 seed per plug.

Media: pH 5.8-6.2; EC 0.7-1.0

Temperature: Ensure 20-22 °C (68-72 °F) for germination until radicle emergence. Afterwards, ensure 18-20 °C (64-68 °F) during night and day. When the roots reach the bottom of the cell, the temperature can be lowered to 16-18 °C (60-64 °F).

Moisture: Keep the substrate saturated (5) to wet (4) for the first 10-14 days. After radicle emergence has occurred, alternate between a wet (4) and a medium (2). Let the media dry back before watering.

Humidity: 95-100% until radicle emergence, then reduce to 40-60%. Provide proper ventiliation and horizontal airflow to improve oxygen levels in the media.

Light: Long days and high light levels will promote early flowering. Provide 1,000-2,500 ft. candles (10,000-25,000 lx) of light after radicle emergence and raise the light level up to 3,000-5,000 ft. candles (30,000-50,000 lx) in the last stage of plug production.

Fertilizer: Maintain an EC <1.0. Fertilized water should not exceed an EC of 0.5. Begin fertilizing early to improve seedling quality. Initial feeding should start after radicle emergence at 50-100 ppm and gradually work up to 100-175 ppm.

Plug Bulking and Flower Initiation: Maintain optimal conditions during the vegetative stage from cotyledon expansion to flower initiation.

Growth Regulators: If necessary, sprays of B-Nine (daminozide) at 2,500 ppm are very effective in toning the plants and controlling growth during the plug stage. Pinching is not required.

Growing On

Media: pH 5.8-6.2; EC 1.5-2.0

Light: After transplanting, you can provide 2-3 weeks of short days to encourage more compact, well-branched plants. Afterwards, high light levels and long days >13 hours will produce high-quality, uniform plants which will initiate flowers. Light levels of 3,000-4,500 ft. candles (30,000-45,000 lx) are recommended.

Temperature: After transplanting, always maintain temperatures >12 °C (54 °F) during night to initiate flower bud development. These low night temperatures up to 16 °C (60 °F) encourage basal branching and compactness for a higher quality plant. It will increase the crop time slightly. A temperature of 16-20 °C (60-68 °F) during days will work well. For

overwintering productions, a frost-free cultivation indoors or a fleece cover for outdoors should be ensured.

Moisture: Alternate between moisture levels moist (3) and medium (2). Allow the media to reach a moisture level medium (2) before re-saturating. Gaillardia is sensitive to wet soil and should therefore be kept rather dry. Avoid waterlogging and do not water the plants from above.

Humidity: 40-60 % humidity is ideal. Providing good ventilation and horizontal airflow will help lower the humidity and dry back the media, providing oxygen to the roots.

Fertilizer: High fertilization levels are required. Feed weekly with 175-200 ppm N using a complete balanced fertilizer.

Growth Regulators: With proper temperature and moisture management, there should be no need for growth regulators. If needed, apply B-Nine (daminozide) as a spray at 2,500-5,000 ppm N to control the growth.

Fungicides: Apply fungicides during long periods of low light, cool temperatures and high humidity.

Common Diseases: Powdery mildew, botrytis, white smut.

Pests: Primarily aphids, thrips and mites.

Timing & Positioning Charts

Plug Crop Time	
288 tray (*1)	5-6 wks
128 tray (*1)	6-7 wks
Finished Crop Time (from 288 tray)	
12-15 cm (5-6") pots (1*)	9-10 wks
17-19 cm (7-8") pots (3*)	11-13 wks

Moisture Codes

Saturated (5)	Water is easily observed when finger is pressed on cell. Water moves freely from the top of the plug to the bottom.
Wet (4)	Media looks black and is not glistening. The media feels wet to the touch but there is very little water movement.
Moist (3)	Water is not easily visible. When finger is pressed on the cell there is very little movement from top to bottom.
Medium (2)	Media is not black, but now looks medium brown. There is no water movement when pressed with finger.
Dry (1)	Media has changed color to a very light brown and is dry to the touch.

All information in our technical guide is based on our own trials and would therefore be as guideline only. Detailed cultivation aspects vary depending on climate, location, time of year and environmental conditions. Benary expressly disclaims any responsibility for the content of such data/information and makes no representation or warranty for the cultivation of any products listed. It is recommended that growers conduct a trial of products under their own conditions.

COLORS OF THE SERIES

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Apricot
GA0101C



Red Shades
GA0103C



Sun
GA0102C