

Ornamental Oregano Kirigami

(*Origanum x hybrida*)

Germination

Approximate seed count (raw): 39,690 to 53,865 S./oz.
(1,400 to 1,900 S./g)

Media

Use a well-drained, disease-free, soilless media with pH of 5.8 to 6.2 and EC of 0.75 to 1.0 mmhos/cm.

Sowing

Sow 4 seeds per cell in 288 plug trays. Do not cover the seeds.

Stage 1 – Germination takes 4 to 5 days.

Soil temperature: 68 to 72°F (20 to 22°C)

Light: Light is required for germination.

Moisture: Keep soil wet (level 4) during Stage 1.

Humidity: Maintain 95 to 97% relative humidity (RH) until radicles emerge.

Plug Production

Stage 2

Soil temperature: 65 to 68°F (18 to 20°C)

Light: Can be up to 2,500 f.c. (26,900 Lux)

Moisture: Allow the soil moisture to slightly dry to level 3.

Fertilizer: Apply fertilizer at rate 1 (less than 100 ppm N; less than 0.7 mmhos/cm EC) from nitrate-form fertilizers with low phosphorous.

Stage 3

Soil temperature: 65 to 68°F (18 to 20°C)

Light: Can be up to 2,500 f.c. (26,900 Lux)

Moisture: Allow the soil moisture to dry to level 2-3.

Fertilizer: Increase fertilizer to rate 2 (100 to 175 ppm N; 0.7 to 1.2 mmhos/cm EC).

Growth Regulators: Kirigami plugs are responsive to daminozide (B-Nine, Alar) spray. Daminozide 1,000 to 1,500 ppm (1.2 to 1.8 g/l 85% formulation or 1.5 to 2.3 g/l of 64% formulation) will give good height control.

Stage 4

Soil temperature: 60 to 65°F (15 to 18°C)

Light: Up to 5,000 f.c. (54,000 Lux)

Moisture: Same as Stage 3.

Fertilizer: Same as Stage 3.

Growing On to Finish

Container Size:

4 to 4.5-inch (10 to 11.5-cm): 1 plug per pot

Quart pot (12-cm): 1 plug per pot

1 gallon (18-cm): 1 to 2 plugs per pot

10-in. (25-cm) basket: 3 to 5 plugs per pot

Media

Use a well-drained, disease-free, soilless media with coarse parts, with pH of 5.8 to 6.2 and EC of 1.0 to 1.2 mmhos/cm.

Temperature (optimum)

Nights: 60 to 65°F (16 to 18°C)

Days: 65 to 68°F (18 to 20°C)

NOTE: Kirigami needs an active climate to grow. It can tolerate light frost and temporary freezing temperature as low as -3°C (27°F) without foliage damage.

Light

High light requirement ($\geq 12 \text{ mol} \cdot \text{m}^{-2} \cdot \text{d}^{-1}$, optimum $\geq 15 \text{ mol} \cdot \text{m}^{-2} \cdot \text{d}^{-1}$). The bracts will develop much deeper purple color when plants are exposed to high light and cool night conditions. Since it can tolerate light frost, it is recommended to produce Kirigami outdoors later in Spring when weather permits for intensive bract color.

Photoperiod

Kirigami is a long day plant. The critical daylength is about 14 hours.

Irrigation

Kirigami requires average to slightly below average amounts of irrigation. Let media dry slightly between waterings and never get saturated. Plants need to grow in well-drained soil and cannot stand wet conditions. Kirigami is susceptible to Botrytis and Stem and Crown rots, especially under outdoor moist to wet conditions.

Fertilizer

Kirigami generally needs moderate fertilization. Use a balanced fertilizer at 150 to 200 ppm N as needed or constant liquid fertilizer with 75 to 100 ppm N with each irrigation. Increase potassium-to-nitrate ratio in later growing-on stage. Maintain media pH of 5.8 to 6.2 and EC of 1.2 to 1.5 mmhos/cm.

Growth Regulators

Kirigami reacts well to daminozide (B-Nine/Alar), but use lower concentrations and repetitions to avoid stunting. Multiple applications (2 to 3 times) of daminozide at 1,500 to 2,500 ppm (1.8 to 3.0 g/l 85% formulation or 2.3 to 3.9 g/l of 64% formulation) works on plant size control. Daminozide application can start 2 to 3 weeks after transplant. Avoid using B-Nine once color is starting on the bracts to prevent bleaching.

Pinching

Pinching is not necessary, if using PGR spray during plug application.

Crop Scheduling

Sow to transplant (weeks):

Plug: 288 (4 seeds per cell)

Size: 5-6

SpringSummer: 4-5

Transplant to finish (from 288 cell)

Container Size: 4 to 4.5-in. (10 to 11.5-cm) pot

Plugs per pot: 1

Weeks from transplant Spring: 10-12

Weeks from transplant Summer: 9-10

Total weeks Spring: 15-16

Total weeks Summer: 13-15

Container Size: Quart Pot (12-cm)

Plugs per pot: 1

Weeks from transplant Spring: 11-13

Weeks from transplant Summer: 9-10

Total weeks Spring: 16-17

Total weeks Summer: 13-15

Container Size: 1 gallon (18-cm)

Plugs per pot: 1-2

Weeks from transplant Spring: 11-13

Weeks from transplant Summer: 9-11

Total weeks Spring: 16-18

Total weeks Summer: 14-16

Container Size: 10-in. (25-cm) basket

Plugs per pot: 3-5

Weeks from transplant Spring: 12-13

Weeks from transplant Summer: 10-12

Total weeks Spring: 17-19

Total weeks Summer: 15-17

Common Problems

Insect: No serious insect problems.

Disease: It is susceptible to Botrytis and Stem and Crown rot, especially under outdoor moist to wet conditions.

Garden and Landscape Information

- Kirigami Oregano is hardy to USDA Hardiness Zone 5b (-26°F/-15°C minimum temperatures).
- Plant in full sun after all danger of frost has passed.
- Heat and drought-tolerant perennial.
- Space plants at 14 to 18 in./36 to 46 cm apart in



- well-drained soil.
- It is also a nice spiller in combos.

NOTE: Growers should use the information presented here as a starting point. Crop times will vary depending on the climate, location, time of year, and greenhouse environmental conditions. Chemical and PGR recommendations are only guidelines. It is the responsibility of the applicator to read and follow all the current label directions for the specific chemical being used in accordance with all regulations.

