

Orange Shades

Bloomingdale II

Ranunculus

Leading the way in uniformity, ease and beauty!



Golden Yellow Shades

Orange Shades

Pink Shades

Red Shades

Rose Shades

White Shades

Ranunculus Bloomingdale II

SAKATA®

Cultural Information for: Ranunculus Bloomingdale Annual

Common Name: Ranunculus

Botanical Name: Ranunculus asiaticus

Seed Count: 37,000/ounce 1,300/gram

Optimum Germination Temperature: 50-59°F / 10-15°C

Optimum Growing Temperature: 46-59°F / 8-15°C

PLUG CULTURE – 7 WEEKS (288 / 12 X 24 TRAY)

Stage 1 (day 1-14) Use a sterilized soil media with plenty of organic matter. A mixture of 70% peat and 30% fine perlite has been found to be highly efficient and accelerates germination and seedling growth. A pH of 5.5 - 6.0 and EC between 0.5 – 0.7 mmhos is recommended for best results. Cover the seed with a very thin layer of medium vermiculite or peat/perlite mixture and water thoroughly. Select a well-ventilated place and avoid strong sunlight. Place seed flats in the coolest possible location in the greenhouse, 55-57°F/13-14°C. Never allow the growing media to dry out until the seed germinates!

Stage 2 (day 15 - 21) After seedlings begin to emerge, reduce moisture and place flats in a well-ventilated and shaded greenhouse (2,000-foot candles/22,000 lux). Maintain 60-64°F/16-17°C during the day and 50-55°F/10-13°C at night. Apply a light fertilizer of 100 ppm N to strengthen the seedlings. Provide 13 hours of darkness (< 10-foot candles/110 lux) for active growth as a long photoperiod promotes dormancy (corm production).

Stage 3 (days 15 – 42) As seedlings progress, increase the fertilizer concentration to 100 ppm N and target a media EC between 0.76 and 1.0 mmhos. The young foliage is sensitive to fertilizer salts so rinse foliage lightly with clear water following fertilizer applications. The use of calcium nitrate-based fertilizers combined with 20-10-20 every 2nd or 3rd watering works well to maintain proper pH and healthy foliage. Moisture stress is the best option to control plant height. Alternatively, apply B-Nine® (daminozide) at 1,500-2,500 ppm/0.15-0.25% as plants fill in. During dark weather apply HID lighting at 300-500-foot candles/3,200–5,400 lux up to 14 hours. Under high light conditions (>5,000-foot candles/54,000 lux) seedlings benefit from a light shade of 30-40%.

Stage 4 (day 43-50) Seedlings have developed 4 true leaves and are now ready for transplanting into pots. Ranunculus becomes reproductive at the fourth true leaf stage. **Do not delay transplanting. Late transplanting creates smaller plants with poor foliage and plant body development.**

NOTE: Burying the plants too deep and covering the crown with soil causes blindness.

GROWING ON

Transplanting: When seedlings reach the fourth true leaf stage, transplant them into 4- 5 inch/10-12 cm pots with a starting soil pH of 5.5 - 6.0. Select a highly fertile soil with good drainage, low in peat contents, with abundant organic matter and well-rotted leaf mulch. Initial growth after transplanting will be slow and it is important to maintain temperatures as low as possible, 45-55°F/7-13°C and never allow daytime temperatures to exceed 77°F/25°C. Place one plant per 4-5 inch/10-12 cm. pot and three per 6 inch /15 cm. or 1-gallon/4-liter pot. Be careful not to damage the delicate root system.

Production: Approximately 2 months after sowing, the plants will begin to grow rapidly. Ranunculus requires adequate nutrition by incorporating slow release fertilizer in the potting medium or applying liquid fertilizer every 7-10 days. Initially apply calcium nitrate-based feeds switching to higher potassium fertilizers once flower buds are visible. Optimum EC is 1.2-1.5 mmhos. Water thoroughly and regularly, and if grown with heat monitor the temperature carefully.

NOTE: Seedlings require 13 hours of continuous darkness (< 10-foot candles/100 lux) for active growth. Long photoperiods promote corm development. Always allow enough space between plants to enable maximum growth. Also, apply boron at 0.25 ppm at each watering to avoid a deficiency characterized by leaf cupping and stunting.

Flowering: Approximately 4-6 weeks after potting the plants should grow to a reasonable size. Flowering occurs 12-14 weeks after transplanting, (19 to 21 weeks from sowing), depending on temperature. For early pot sales maintain a daytime temperature of 60-68°F/16-20°C and a night temperature of 45-50°F/7-10°C.

Growth retardant: At higher temperatures, both stems and leaves may show excessive growth. Applications of B-Nine (daminozide) at the rate of 2,500 ppm will yield good results. Apply B-Nine on bright sunny mornings when soil is relatively dry, and buds first show at the base of the plants. To control flower stem stretch, increase potassium to nitrogen ratio, lower temperatures, regulate watering and provide good air circulation.

Insects: Aphid, fungus gnat, leaf miner, spider mite, thrip, whitefly

Diseases: Botrytis, leaf spot, pythium, powdery mildew, wilt

Good culture and nutrition create healthy plants that are less susceptible to disease!

Schedule (northern hemisphere)

Sow*	Transplant	Flower
Mid-August	Early October	Mid-February to Mid-March

*Growers often wish to produce an early crop of ranunculus, germinating and growing young plants in the heat and long days of summer. Under these conditions plant growth often stalls, or plants produce very weak growth. This is because under long days, (>12 hours), Ranunculus naturally want to produce corms rather than produce vegetative growth. Providing an 11-hour dark period (< 10-foot candles/100 lux), maintains active vegetative growth. Excessive high temperature will also weaken growth. The optimum growing temperature is 59°F/15°C days and 46°F/8°C nights.

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.