

# Ranunculus Bloomingdale II

Crop	Ranunculus
Series	Bloomingdale II
Botanical name	<i>Ranunculus asiatics</i>
Plant type	Biennial & Perennial
Seed type	Raw
Seed count	1,000-2,000 seeds / gr
Germination	15°C - 14 days light inhibited
Growing	8-15°C
Optimum pH	5.8-6.2

## Plug Culture: 7 weeks (288 cell 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. 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 plug trays in the coolest possible location in the greenhouse, 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 trays in a well-ventilated and shaded greenhouse. Maintain 16-17°C during the day and 10-13°C at night. Apply a light fertilizer of 100 ppm of nitrogen to strengthen the seedlings. Provide 13 hours of darkness for active growth as a long photoperiod promotes dormancy (corm production).

**Stage 3** (day 22-42) Maintain cool greenhouse conditions and avoid temperatures above 25°C during this period. Fertilize every 10 days with 100-150 ppm of nitrogen for strong growth, but avoid excess salts.

**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.

## Transplanting to finish: 12-14 weeks

**Transplanting:** When seedlings reach the fourth true leaf stage, transplant them into 10.5-12 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, 7-13°C and never allow daytime temperatures to exceed 25°C. Place one plant per 10.5-12 cm pot and three per 15 cm or 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. Water thoroughly and regularly, and if grown with heat monitor the temperature carefully.

**NOTE:** Seedlings require 13 hours of continuous darkness 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 16-20°C and a night temperature of 7-10°C.

**Pests:** aphid, fungus gnat, leaf miner, spider mite, thrip, whitefly

**Disease:** botrytis, leaf spot, pythium, powdery mildew

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

**Schedule:**

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 produces 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, maintains active vegetative growth. Excessive high temperature will also weaken growth. The optimum growing temperature is 15°C days and 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 Asian conditions such as in Japan and Sakata cannot be held responsible for any crop damage related to the information given herein. Always follow manufacturer's label instructions. Testing a few plants prior to treating the entire crop is best.*