



# Zinnia Profusion, Profusion Double

|                |                               |
|----------------|-------------------------------|
| Crop           | Zinnia                        |
| Series         | Profusion, Profusion Double   |
| Botanical name | <i>Zinnia hybrida</i>         |
| Plant type     | Annual                        |
| Seed type      | Raw                           |
| Seed count     | 450 seeds / gr                |
| Germination    | 25°C - 5 days light inhibited |
| Growing        | 18-21°C                       |
| Optimum pH     | 5.8-6.2                       |

## Plug Culture 4 weeks (200 cell tray)

**Stage 1** (days 1-5) Use a well-drained media with a low fertilizer. Prior to sowing, water the plug tray to the point of drip. Then, sow the seed and cover with a light cap of medium vermiculite. Do not water after sowing, neither the day of sowing nor the day following sowing. Then, water the seedlings as needed allowing the media to dry slightly in between watering. An overly wet soil will decrease germination. Optimum soil temperature is 25°C.

**Stage 2** (days 6-10) Zinnias germinate quickly. After emergence place the plug trays in a well-ventilated greenhouse with high light. Maintain a day temperature of 21°C and a night temperature of 18°C. A light application of fertilizer at 50-100 ppm nitrogen will greatly benefit in helping to establish strong and healthy seedlings.

**Stage 3** (days 11-21) Water and fertilize Zinnias as needed to maintain healthy seedlings. An application of 100 - 150 ppm nitrogen is recommended at least once a week. Watering just before wilt is recommended to avoid lush growth. Water thoroughly to prevent high EC levels, (> 2.0 SME). Watering early in the morning allows the foliage to dry thoroughly and prevents potential disease problems. If necessary, one can apply plant growth regulators to check growth 15-17 days after sowing.

**Stage 4** (days 20-28) Zinnias develop rapidly and are often ready to transplant after three weeks,

(depending upon the plug cell size used). Option to drop the air temperature to 17°C to hold plug trays for a few days. Avoid temperatures below 15°C which invites disease.

**Lighting:** Zinnia Profusion flowers more quickly under short day length (< 12 hours). To delay flowering and build plant body, extend the day length to 16 hours from day 15 to day 28. For large containers (10 cm.) use a 128 (8 x 16 cells) plug tray and provide long days from days 15-42.

## Transplanting to finish: 5-8 weeks

**Container Size:** Zinnia Profusion is a dwarf variety with strong basal branching. It is best to sell Zinnia Profusion in the color sales, use larger containers or 10 cm pot.

**Media:** Peat-lite mixes with a blend of peat, perlite and vermiculite work well at a soil pH of 5.8-6.2.

**Temperature:** Zinnia is sensitive to disease and cool temperatures can invite disease and foliar problems (below 16°C). Warm temperatures can stretch the plants (above 24°C). Profusion has some disease tolerant, but the above guidelines are recommended.

**Fertilizer:** Weekly applications of 200-250 ppm nitrogen using a well-balanced calcium nitrate-based fertilizer helps to produce plants of high quality. Zinnia is sensitive to boron deficiency, characterized by tip abortion, crinkled leaves and leaf edge burn. Applying 0.25 ppm of boron with each fertilizer application is necessary.

**Pests:** aphids and thrips

**Disease:** Zinnia Profusion offers good disease tolerance and in general is not attacked by the many foliar diseases that affect zinnia. Good sanitation and growing culture will also aid in keeping the plants healthy. Do not place heavy mulch around the base of the plants as this may cause stem rot at the soil line.

**Scheduling:**

| Container | Weeks from Sow | Comment          |
|-----------|----------------|------------------|
| 10 cm     | 10-11 weeks    | 1 plant per pot  |
| 15 cm     | 11-12 weeks    | 3 plants per pot |

*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.*