Viola x wittrockiana F1 **Ultima**

Medium sized Pansies in innovative colours and unique patterns to highlight arrangements and make any assortment complete.

- For packs, pots, patio containers, baskets, etc.
- Non-stretching, well branching plants
- Good response to PGR
- Medium sized flowers
- Multi-flowering
- Tolerant to all weather conditions
- Great garden performance
- Excellent overwintering ability
- A 'must have' to make your assortment complete

Annual	Bedding Plant
Bedding + mixed combo	Half shade + full sun
Upright	800/gram
15 cm	Normal
10 cm	Pack, pot 9 cm

Culture Guide

Plug Culture

Stage 1 Sow Viola seed in a well-aerated, peat based, plug mixture with a pH between 5.5 and 5.9 to avoid excessive growth and root problems. Cover lightly with medium sized vermiculite. After sowing, water the plug well. Optimum germination temperature is between 18-20°C. When using a germination chamber, remove plug trays when the seed coat is cracked. The use of primed seed and a germination chamber with a fine mist system to maintain moisture levels is ideal.

Stage 2 Maintain temperatures at 18°C, if possible, and provide good air flow. Light levels should be maintained up to 32,000 lux, without causing heat or water stress. When seedlings begin to appear in the tray, lightly fertilize with 75 ppm of N from a well-balanced fertilizer containing trace element. After the initial feed, begin fertilizing with 100 ppm of N. A calcium nitrate-based fertilizer works well to build strong compact plants. Target boron level is 0.25 ppm CLF (constant liquid feed).

Stage 3 Maintain soil pH between 5.5 and 5.8. Ideally, seedlings should be given high light levels to reduce stretching. Moving plants outdoors will reduce temperatures and provide optimal air movement. When applying fresh water, (no fertilizer), still apply trace elements; especially boron, and keep water alkalinity at 60-80 HCO3 to maintain soil pH between 5.5 and 5.8. The seedlings are filling in the tray, fertilize as needed to maitain an EC of 0.8-1.0 mmhos (1:2 slurry). Ideally, seedlings should be given higher light levels to control stretch. Moving plants outdoors under a saran house will reduce temperatures and provide optimal air movement. It is best to transplant earlier rather than apply growth regulators.

Stage 4 Ideally, seedlings should be given higher light levels to control stretch. Moving plants outdoors under a saran house will reduce temperatures and provide optimal air movement. It is best to transplant earlier rather than apply growth regulators. Reduce fertilizer to tone the plants and prepare them for transplanting.

Pack & Pot Culture

In general Viking is more sensitive to day length and temperature than is Dynamite. High heat and short days delay and or decrease flowering.

Media Transplant plugs into a well-aerated compost with a pH between 5.5 and 5.9. EC: 2-3. Avoid planting the plugs too deep to prevent stem rot.

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Temperature	Un-heated house: For the first two weeks after potting, keep 15-18°C to stimulate root growth. Then, maintain temperatures as cool as possible. Over-Winter under frost free conditions (minimum temperature 3-5°C). Forcing at 10-12°C.
Fertilizer	Fertilize with 150-200 ppm of N from a well-balanced fertilizer to ensure a healthy start. Violas and pansies are sensitive to boron deficiency characterized by deep green foliage, crinkled foliage and tip abortion. It is recommended to supply 0.25 of boron at each watering. Be sure to check the boron level in your water supply to avoid oversupplying this micro-element.
Lighting	Provide high light, up to 75,000 lux, and shade only to control high temperatures.
Growth regulators	In the early Autumn season, under warm temperature conditions, Pansy Viking sets bud later and may require additional applications of chemical growth regulators compared to Dynamite.
Pests & diseases	Major root diseases include Pythium, Phytopthora and Thielaviopsis. Thielaviopsis or Black Root Rot is often a problem early in the season when temperatures are high. Research has shown that the disease is checked at a pH of 5.5 or lower.
Crop schedule	Crop time in cool northern regions: Un-heated house, 22-26 weeks (sowing September - sales March). Heated house: 11-13 weeks (sowing December/January - sales March/April or sowing July - sales September/October). Crop time in warm southern regions: 11-13 weeks (sowing July/August - sales October). In late Summer under high light and warm temperature conditions, reduce crop time by 1-2 weeks.

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