PASSIAN in Seed

## Amaranthus

Crop	Amaranthus	
Series	Aurora, Early Splendor,	
	Illumination, Tricolor	
	Splendens Perfecta	
Botanical name	Amaranthus tricolor	
Plant type	Annual	
Seed type	Raw	
Seed count	1,600 seeds / gr	
Germination	20-25°C - 7 days light inhibited	
Growing	16-25°C	
Optimum pH	5.8-6.2	

## Plug Culture: 4 weeks (288 cell tray)

**Stage 1** (days 1-7) Sow seed into a plug tray filled with sterile and well-drained media with a pH of 5.8-6.2. Lightly cover the seed with coarse vermiculite or media as darkness is required for germination. Maintain sufficient humidity and a temperature of 25°C.

**Stage 2** (days 8-14) After seedlings emerge, move plug trays to a bright and well-ventilated greenhouse and reduce day temperature to 20-21°C with a night temperature of 16°C. Lightly fertilize with 75 ppm nitrogen using a calcium/ magnesium formulation.

**Stage 3** (days 15-23) Seedling grow rapidly so do not over fertilize. Allowing the media to dry in between irrigations will help to tone the seedlings and prevent overgrowth.

**Stage 4** (days 24-28) Seedling should have 2 pairs of true leaves. Apply clear water and reduce temperature to 13-16°C to tone the plants and prepare them for transplanting.

## Transplanting to finish: 10 weeks

**Potting/Transplanting**: Transplant into 10 cm pots filled with a well-drained media with low soluble salts. Transplant seedlings on time in order to maximize plant height, as plants have a strong tap root system. For use in mixed containers where a more compact plant is desired, delay transplanting 3-4 weeks with allowing the seedlings to stretch.

For landscaping use, do not delay transplanting. It is important to transplant into a ground before making pot band in order to get enough plant height.

**Media**: Select a well-drained media with a pH of 5.8-6.2 and an EC of 0.5 mS/cm (1:2 slurry).

**Temperature**: Amaranthus tolerates a wide temperature range but grows best under high heat and humidity. Optimum temperature range is 16-25°C.

**Fertilizer**: Amaranthus requires minimal fertilizer. Apply 100 ppm nitrogen weekly or as needed to maintain an EC of 0.7 to 1.0 mS/cm (1:2 slurry). To promote bright foliage colors, do not over nourish, particularly with nitrogen.

**Lighting**: Full to partly sunny location.

**Paint growth regulators**: Providing optimum temperatures, high light, good ventilation and low phosphorus promotes compact plants. If needed, plant growth regulators with active ingredients such as daminozide, chlormequat and ancymidol are effective. Avoid spraying too early before the plants are filled in as some of series set buds early; especially during periods of high light, long days and warm temperatures.

## Crop Schedule:

Sowing	Foliage Coloring	Area
March-April	July-August	Warm Area
April-May	August-September	Mild Area
May	August-September	Cold Area

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.