

# easy grow guide

## begonia bossa nova

(F1 begonia boliviensis)



### Plug Production: 512 plugs, 288 plugs, 72-128 plugs

<b>Sowing/Media:</b>	Use a well-drained, disease-free, peat based plug medium with pH 5.5-5.8, EC 0.5-1.0 mmhos. No covering is needed.
<b>Germination Stages 1 &amp; 2: (14 days)</b>	Media temperature should be 73-78°F (23-25°C). Keep medium uniformly moist at all times. Light is not essential for emergence, but additional light at 14 hours per day will greatly enhance germination and early growth. Maintain high humidity until day 14 when it can be reduced to around 50%. Cotyledons should have expanded by 14 days.
<b>Germination Stage 3:</b>	Media temperature should be 68-72°F (20-22°C). Once true leaves are halfway expanded, dry off the media surface slightly between irrigations, but due to the shallow rooting nature of Begonia, avoid drying back too far as this will result in uneven, stunted growth. Also avoid using cold irrigation water, 65°F (18°C) is ideal. Keep light levels 1500-3000 f.c. for 14 hours per day for optimum growth. Feed every other irrigation with 100-150 ppm N from 20-10-20, 15-5-15 or 17-5-17. Keep media pH 5.5-5.8 and EC 0.5-1.0 mmhos, avoid high salt levels in the media. A layer of horticultural fleece (frost cloth) can be used to cover the trays once out of the chamber, to help prevent problems with algae and sciarid fly.
<b>Germination Stage 4:</b>	Media temperature can be lowered to 65-68°F(18-20°C). Keep light levels 3000 f.c. approx for a minimum of 14 hours per day. Water early in the day to avoid leaf scorch on sunny days and once roots reach the bottom of the plug, the top half can be allowed to dry between irrigations to help prevent algae formation. Feed as required with 100-150ppm N from 15-5-15, 17-5-17 or 13-2-13 to tone plants. Growth regulators are not required. <i>N.B. Due to the plug crop time of tuberous Begonias, sowing into a small cell (512) and then moving on into a larger cell (72-128) can improve results if ideal conditions can't be achieved. This works particularly well if temperatures and moisture levels are difficult to keep stable.</i>

### Growing On to Finish: 4-6" (10.5-15cm) pots, larger containers/baskets

<b>Media:</b>	Use a well-drained, disease free, peat-based growing mix with pH 5.5-5.8, EC <1.5 mmhos. Do not bury the plugs. As this can encourage crown rot.
<b>Temperatures:</b>	Keep soil temperature 65-68°F(18-20°C) for rooting out, then lower to 61-68°F(16-20°C) to grow on. Once established, night temperatures can be dropped as low as 50-54°F(10-12°C).
<b>Light:</b>	Keep light levels <4000 f.c. Low light levels promote bigger leaves and leafy growth, high light levels promote more compact habit and prolific flowering. Day length is critical to achieve the best quality – maintain a minimum of 14 hour days for more showy plants.
<b>Irrigation:</b>	Practice a good wet/dry moisture cycle, but avoid over drying, especially wilting as this will result in uneven and stunted growth. Water early in the day to avoid leaf scorch on sunny days. Bossa Nova responds well to sub-irrigation.
<b>Fertilizer:</b>	Feed once-twice per week with 200-300ppm N from 20-10-20, 15-5-15 or 17-5-17, but alternating with a higher potassium feed will help to keep plants compact when flowering. High nitrogen feeds will promote larger, softer leaves. Keep media pH 5.5-5.8 and EC <1.5 mmhos.
<b>Growth Regulators:</b>	Managing moisture, fertilizer, light and temperature is the best way to control growth. Sprays of B-Nine (1500-2500ppm) can be used if needed.
<b>Pests:</b>	Fungus gnats and Shoreflies during propagation.
<b>Diseases/Issues:</b>	Pythium, Botrytis, water droplets on the foliage may cause scorch in high heat and light levels.

### Plug Times:

<b>512 Plug, 288 plug, 72 plug</b>	512 plug – 5-6 weeks, 288 plug – 7-9 weeks, 72 plug (from a 512) – 3-4 weeks
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### Transplant to Finish:

Container	Plants/Container	Transplant to Finish	Total Crop Time
<b>4" (10.5cm) Pots</b>	1 x 288 plug	7-8 weeks	14-16 weeks
<b>12" (30cm) Baskets</b>	5 x 72 cell plugs	8-10 weeks	18-20 weeks

Crop times are based on UK trials in optimum conditions. Alternative environmental conditions and cultural regimes can alter the crop times stated above.