

easy grow guide

petunia espresso & espresso grande

(F1 Petunia xhybrida)



Plug Production: 512 or 288 plugs

Sowing/Media:	Use a well-drained, disease-free, peat based plug medium with pH 5.5-5.8, EC <1.0 mmhos. No covering needed. Use pelleted seed for ease of sowing.
Germination Stages 1 & 2: (4-5 days)	Keep medium uniformly moist, not saturated and reduce once cotyledons are open. media temperature should be 72-75°F (22-24°C), keep light levels <2500 f.c. Light benefits germination and daylength of 14 hours or above will improve seedling quality.
Germination Stage 3: (7-10 days)	Media temperature should be 68-72°F (20-22°C). Once cotyledons are fully open, dry the media down between irrigations to improve rooting, control floppiness and encourage even seedling growth. Keep light levels between 2500 and 3000 f.c. Again >14 hour days will improve growth rate and HID lighting will be beneficial during periods of low light. Feed every other watering with 15-5-15, 17-5-17 and even 20-10-20 if light levels are high. Media pH at 5.5-5.8 definitely <6.5, EC 1.25-2.0 mmhos.
Germination Stage 4:	Media temperature can be lowered to 62-65°F (16-18°C). Dry down between irrigations. Keep light levels around 3000 f.c. Fertilize as required using 13-2-13 to help tone seedlings before transplanting

Growing On to Finish: Packs, 4.5 inch (11cm) pots

Media:	Use a well-drained, disease free, peat-based growing mix with pH 5.5-5.8 and EC <1.5 mmhos. Avoid burying plugs to keep the crown of the plant out of the media.
Temperatures:	Temperatures for rooting out after transplant should be 65-68°F (18-20°C) Temperatures for growing on can be lowered to 62-65°F (16-18°C). Avoid growing cooler than 60°F (15°C) before flowering as cool temperatures will delay flowering.
Light:	Light levels should be maintained at 3000 - 5000 f.c. HID lights can be used to extend daylength beyond 14 hours during periods of low light. This will promote more compact growth and earlier flowering. Night break lighting can be used but can cause stretching.
Irrigation:	Practice a good wet/dry moisture cycle to control height and root growth. Petunias can tolerate mild wilting.
Fertilizer:	Feed 1-2 times per week with 150 – 200 ppm N from 15-5-15, 17-5-17. Keep media pH 5.5-5.8, definitely <6.5 and media EC 1.25 – 2.0 mmhos (saturated paste).
Growth Regulators:	Due to the naturally compact, branching habit of the Espresso series', little or no growth regulators are required. Growing dry at >14 hour days should help avoid the need for PGRs. If you need to use them or desire a more compact plant you can use sprays of B-Nine (1000-5000 ppm), A-Rest (3-7 ppm), Bonzi (10- 30 ppm), or Sumagic (5-15 ppm) as needed. It is best to run your own trials to avoid overdosing, as weather and cultural regimes can affect the requirements.
Pests:	Aphids, Thrips.
Diseases:	Pythium, Botrytis, Phytophthora. High pH >6.5 can cause yellowing of the upper leaves. Lack of fertilizer can cause lower leaves to turn purple or yellow.

Plug Times:

512 Plug:	3-4 weeks from sowing to transplant
288 plug:	4-5 weeks from sowing to transplant

Transplant to Finish:

Container	Plants/Container	Transplant to Finish	Total Crop Time
Packs	1 x plug	4-5 weeks	7-9 weeks
4.5 inch (11cm):	1 x plug	5-6 weeks	8-10 weeks

Crop times are based on optimum conditions. Alternative environmental conditions and cultural regimes can lengthen the crop times stated above.