

easy grow guide

ornamental corn

field of dreams

(Zea mays japonica)



Plug Production: 128 plugs, direct sow - 4-6 inch (10-15cm) pots or larger

Sowing/Media:	Use a well-drained, disease-free, peat based plug or general growing medium with pH 5.8-6.5 and EC around 0.75 mmhos. Corn likes fertile soil so an initial charge of nutrient in the medium is beneficial. Cover seed with approx 0.5" (1cm) of peat based plug medium to add stability to the seedlings during germination. Large plugs such as 128s or > can be used but do not allow the seedlings to become root bound as it will affect their performance once transplanted and lengthen crop times. Sowing directly into the final container is recommended.
Germination Stage 1:	Keep media moisture high until radical emergence (1-2 days), media temperature should be 72-75°F (22-24°C), light is not required for germination. Cooler temperatures slow germination rate. If germinating in cool temperatures, it may be beneficial to treat the medium with a fungicide prior to sowing, to prevent damping off.
Germination Stages 2 and 3:	Dry the medium down but avoid extremes of wet and dry, aim to keep evenly moist, media temperature can be lowered to 65-70°F (18-21°C), Fertilize with 50-75ppm N from a well balanced fertiliser, maintain pH 5.8-6.5 and EC around 0.75 mmhos. Once fully germinated, high light levels improve the quality of the plant by encouraging branching, stem strength and thickness, controlling height and improving foliage colour.
Germination Stage 4:	Media temperature can be lowered further to slow growth and control height if necessary, but keep above 60°F (15°C) ideally. Keep media evenly moist avoiding extremes of wet and dry. Fertilize with 100-150ppm N from a well balanced fertilizer. Keep light levels high. Full germination will take 7-10 days.

Growing On to Finish: 4-6 inch (10-15cm) pots or larger

Media:	Use a well-drained, disease free, peat-based growing mix with an initial nutrient charge and pH 5.8-6.5 and EC around 0.75 mmhos.
Temperatures:	Temperatures for growing on should be between 60-85°F (15-30°C), no lower than 50°F (10°C) as this can cause iron and phosphorus deficiency. The higher the temperature, the shorter the crop time. Higher temperatures also result in taller plants.
Light:	Light levels should be as high as possible to improve the quality of the plant by encouraging branching, stem strength and thickness, controlling height and improving foliage colour. Variegation in the foliage should appear around 2-3 weeks after sowing if conditions are favourable, when there are 4-6 true leaves present.
Irrigation:	Try to maintain even media moisture, again avoiding wilting and overwatering.
Fertilizer:	Fertilize with 150-225ppm N from a well balanced fertilizer 1-2 times per week. Excess Nitrogen will reduce the variegation in the foliage
Growth Regulators:	Bonzi and Florel can be used if necessary. Always apply at the recommended label rates on a small population first to test phytotoxicity before applying to the entire crop. Growth can also be successfully controlled by good water management, high light levels and cooler temperatures.
Pests:	Aphids
Diseases:	Damping off can occur when sown in cool, wet conditions

Plug Times:

128 Plug:	1-2 weeks from sowing to transplant (do not allow plugs to get root bound)
------------------	--

Transplant to Finish: (*direct sowing 3 seeds per pot is recommended)

Container	Plants/Container	Transplant to Finish	Total Crop Time
4-6 inch (10-15cm):	1 plug / 3 plugs	6-7 weeks	7-9 weeks
*4-6 inch (10-15cm):	3 seeds (direct sown)	5-7 weeks (sow to finish)	5-7 weeks

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