

AmeriSeed ZINNIA CULTURE GUIDE (1)

Zinnia F1

Zinnia elegans



Scientific name : *Tagetes erecta*
Use : Packs, Pots, Beds, Containers Borders and Landscaping
Plant Type : Annual
Seed count : 100-120 seeds/gram
Seed form : De-tailed

● Plug Production :



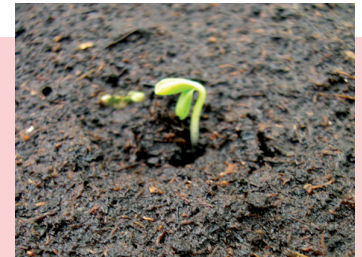
Plug Stage

Note : Zinnia prefer to be direct sown rather than transplanted. 200-cell plug tray size is recommended for sowing Zinnia Holi seeds. Sow seeds in a well-drained and disease-free media with a pH between 5.5 – 6.0. EC 0.5 – 0.75 mS/cm.

Cover seeds lightly with vermiculite. Ideal temperature for germination is at 20 – 23 °C (68 – 72 °F). Higher temperatures can reduce germination and cause weak seedlings. Light is not required for germination. Germination takes approximately 2 to 3 days.

Stage 1

Radicle emergence 5-6 days, light is not required for germination. Keep media moist but not too wet. Fertilizer is not necessary at this stage.



Stage 2

Expansion of cotyledons 3-6 days. Supply extra light 2,500 foot candles / 25,000 Lux. Keep media moisture at level 3-4 medium wet. Apply fertilizer in nitrate form 80-100 ppm, ratio 15-5-15.



Stage 3

Development of first true leaves 6-10 days. Light 2,500 foot candles / 25,000 Lux. Keep media moisture levels medium to medium wet.

Allow media to approach level 3 and re-saturate to level 4. very wet media, will encourage development of a weak root system and disease. Feed 1-2 times per week at 100-150 ppm N – 0.7 to 1.2 EC.



Stage 4

4-6 true leaves takes 10-25 days. Moisture and fertilizer same as stage 3. Growth regulator is not required unless plugs are grown at high temperatures and

lowlight levels where plug stretch is a problem. Do not hold the plugs too long, as this may induce premature flowering.



AmeriSeed ZINNIA CULTURE GUIDE (2)

● Growing On :

Sowing to transplant	: 25 – 30 days
Transplant to flowering	: 50 – 55 days
Flower size	: 8 – 9 cm.
Plant height	: 25 – 30 cm.
Plant width	: 25 – 30 cm.

Information	Stage 1	Stage 2	Stage 3	Stage 4
Moisture	Level 4	Level 3-4	Level 3-4	Level 3-4
Temperature	20-23 °C (68-73 °F)		20-24 °C (68-75 °F)	
Light	Not require	Up to 2,500 f.c. (26,900 lux)		5,000 f.c. (53,800 lux)
Fertilizer		Less than 100 ppm N – (0.7 EC)	100 to 170 ppm N – 0.7 to 1.2 EC	

Transplanting Stage :

20 to 25 days from sowing, plants can be transplanted into pots or beds. Media pH is 5.5 – 6.0 and EC 1.5 – 2.5 sM/cm. In low light conditions, plant will be stretch. Use Growth Regulator, GR to control plant stretch.

Media :

Ground coco peat coir, sand, dolomite, slow release fertilizer and ferrous sulfate.

Soak coco peat in water for 1 night to reduce the EC/ salt content.

Coco peat	180 Liter
Sand	60 Liter
Dolomite	500 grams
Slow-Release Fertilizer (SRF)	250 grams
Ferrous Sulphate	500 grams

Use fertilizer at 200 – 250 ppm N. Zinnia Holi requires no pinching.

Grow on at 21 – 25 °C (70-78 °F) for 3 – 4 Weeks. Give fertilizer of Nitrogen in a well-balanced mix at 200 – 300 ppm N once a week. To improve the strength of the stems, use of calcium nitrate is recommended.

Moisture level : Media should be allowed to dry between irrigations. Alternate between moisture level 1 and 3. Do not allow irrigation water to contact the leaves or petals or flowers as it may cause them to expose to diseases. Extending the daylength during short day or winter to 14 hours will help ensure the flowers to be fully double and large compact bush.

Fertilization :

Moderate fertilization levels are required. Apply fertilizer with 200 – 300 ppmN, using complete balance fertilizer once a week. Maintain pH at 5.5 – 6.0 and EC 1.5 – 2.5 sM/cm until crop ends.

Plug Fertilizer : N: P: K = 6:1:7

Liquid Fertilizer	(rate per 100 liter of water)
15-0-0 (Calcium Nitrate)	33 Grams
0-52-34 (Mono Potassium Phosphate)	21 Grams
13-0-46 (Potassium nitrate)	24 Grams
10-0-0+Mg (Magnesium Nitrate)	18 Grams
Ferrous Sulphate	5 Grams
Solute (Micronutrient)	1Grams

Diseases : Powdery mildew, Botrytis, Bacterial Leaf Spot. Alternaria Leaf Spot

Pest : Aphids, Whitefly, Thrips

To prevent these diseases, control moisture and humidity levels and use preventive fungicides. Use Pesticides as per label recommendations.

