GrowerFacts

Dill Bouquet

(*Anethum graveolens*)

Germination

Direct sowing into the finish container is recommended

- Time of radicle emergence (4-7 days)
- Soil temperature 68-72°F (20-22°C).
- Keep media evenly moist but not saturated.
- Do not cover or bury the seed.
- Light at 100-400 foot-candles may be beneficial for germination.
- Soil pH 5.5-5.8 and soluble salts (EC) less than 0.75 mmhos/cm (2:1 extraction).
- Dill is very sensitive to high salts, particularly high ammonium, during germination.
- Keep ammonium levels to less than 10 ppm.

Plug Production

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STAGE 1 - Time of radicle emergence (4-7 days)

- Soil temperature 68-72°F (20-22°C).
- Keep media evenly moist but not saturated.
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- Soil pH 5.5-5.8 and soluble salts (EC) less than 0.75 mmhos/cm (2:1 extraction).
- Dill is very sensitive to high salts, particularly high ammonium, during germination.
- Keep ammonium levels to less than 10 ppm.

STAGE 2 - Stem and cotyledon emergence (5-8 days)

- Soil temperature 68-72°F (20-22°C).
- Reduce moisture levels once radicle emergence occurs! Allow the soil to dry out slightly before watering for best germination and rooting.
- Gradually increase light levels to 500-1000 foot-candles.
- Keep soil pH 5.5-5.8 and EC to less than 0.75 mmhos/cm.
- Keep ammonium levels to less than 10 ppm.
- Begin fertilizing with 50 75 ppm N from 14 0 14, 15-5-15 or a calcium/potassium nitrate feed once cotyledons are fully expanded.
- Alternate feed with clear water.
- Irrigate early in the day so foliage is dry by nightfall to prevent diseases.

STAGE 3 - Growth and development of true leaves (14-21 days)

- Soil temperature 65-68°F (18-20°C).
- Allow the soil to dry thoroughly between irrigations but avoid permanent wilting to promote root growth and control shoot growth.
- Maintain soil pH 5.5-5.8 and EC less than 1.0 mmhos/cm.
- Increase feed to 100 150 ppm N from 20 10 20 alternating with 14 0 14 or other calcium/potassium nitrate fertilizer.
- Gradually increase light intensity to 1000-1500 foot-candles.
- Fertilize every 2nd – 3rd irrigations.
- If 15-0-15 is used supplement with magnesium 1 2x during this stage, using magnesium sulfate (16 oz/100 gal) or magnesium nitrate. Do not mix magnesium sulfate with calcium nitrate as precipitate will form!
- Use DIF whenever possible, especially the first 2 hours after sunrise, to control plant height.
- Chemical PGR's can not be used on vegetables and herbs.

STAGE 4 - Plants ready for transplanting or shipping (7 days)

- Soil temperature 62-65°F (17-18°C).
- Allow soil to dry thoroughly between irrigations.
- Gradually increase light intensity to 1500-2500 foot-candles.
- Maintain soil pH 5.5-5.8 and EC less than 0.75 mmhos/cm.
- Fertilize with 14 0 14 or calcium/potassium nitrate feed at 100 150 ppm N as needed.
- If not potted up once established in the cell pack, dill will flower within 10 weeks.

Growing On to Finish

TEMPERATURE

- **Night:** 55-60°F (13-16°C)
- **Day:** 60-65°F (16-18°C)

LIGHT

Maintain high light levels while maintaining moderate temperatures.

MEDIA

Use a well-drained, disease-free soil-less medium with a medium initial nutrient charge and a pH 5.5-6.2.

FERTILIZATION

- Fertilize every other irrigation with 15-0-15, 15-5-15 alternating with 20-10-20 at 150-200 ppm nitrogen.
- Maintain medium electrical conductivity around 1.0 mmhos/cm (using 1:2 extraction).

CONTROLLING HEIGHT

- Once plants are rooted to the sides of the containers they can be allowed to wilt prior to irrigation to provide some height control.
- Height can also be controlled by withholding fertilizer, especially phosphorous and ammonium-form nitrogen.
- Dill is responsive to day/night temperature differential (DIF), and is shorter with a negative DIF.
- Chemical PGR's can not be used on vegetables and herbs.

COMMON PROBLEMS

Insects: Aphids

Diseases: Fungal diseases

Post Production Care

TEMPERATURE

Night: 55-60°F (13-16°C)

Day: 60-65°F (16-18°C)

- Optimum conditions may be difficult to maintain, especially if plants are displayed outside.
- Using a negative DIF will help keep the plants short and of high quality.

LIGHT

Dill prefers full sun. Partial shading may be beneficial during retail display.

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