



Lepidium

GREEN DRAGON™

Updated February 2022

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Lepidium GREEN DRAGON™

For the grower



Planting Material:

Seeds, Seedlings



Planting Density:

165,000 plants per Hectare



Growth Cycle:

10-12 weeks planting to harvest,
2 weeks harvest × 1 flush

*Under Israeli conditions



Expected Yield:

550K stems/Hectare /flush

* can be planted year-round

Initiation to Flowering:

No specific requirements for Inducing flowering

Plant protection:

- Root Aphids
- TSWV transmitted by Thrips



Advantages for the Grower:

- Short cycle, flexible incorporation in annual production program
- Very efficient in harvest:
 - Stems do not tangle, no breakage
 - Scarce foliage in the inflorescence
- High productivity in a short time span
- Less susceptible to pests

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Young plants ready for planting

- Plugs should be planted when seedlings are still young and fresh, before any signs of stress are seen
- Young plants are usually ready 3 to 4 weeks after sowing
- Do not wait! Once plants are ready they should not be left on the table but rather taken to the field for planting



Area Preparation & Planting level

- **Beds:** One meter wide beds and paths of 0.5m
- **Irrigation:** 4 drip lines and overhead system (for the first 2 weeks)
- **Support System:** 2 supporting nets
- **Planting density:** 25-30 plugs per m² (making it 75-90 plants/m²)



- One treatment of 100ppm should be applied when the rosette is well formed and approximately 25cm in circumference. Under Kenyan weather conditions (see last slide) this occurs 4-5 weeks after planting. We should follow rosette development under your conditions to determine the proper time for GA application
- GA should be given before shoots have developed as they may be affected and become bent or deformed
- Inductive stems should be removed before GA application.
- Under cold conditions one treatment of 100ppm may not be sufficient and an additional selective treatment would be effective. This treatment should be given on plants with no stems at 120-150 ppm
- In any case, make sure the GA does not touch shoots that have already developed

GA application stage



Plants ready for GA treatment



Plants after an insufficient GA application

Irrigation and Fertilizer regime



- Generally speaking, Lepidium **GREEN DRAGON™** enjoys high levels of irrigation. In Kenya, best results were achieved at irrigation levels of 30 to 50 m³ per hectare per day
- On first three days after planting no fertilizer should be applied to allow the plants to establish roots into the soil
- Start applying fertilizer with the irrigation on 3 days per week at EC levels of 1.0 to 1.2
- Once plants are well developed, EC levels should be increased to 1.5. The EC of the soil solution at root level should be 1.8
- Avoid all stress on the plants from all angles in all the growing stages

Signs of stress



Lepidium GREEN DRAGON™

Cultivation Highlights

Planting density: 24 plugs (three seedlings per plug) in 1 meter square

Support System: The use of two support nets is highly recommended

GA application: GA₃ at a concentration of 100ppm should be applied three weeks after planting

Growing conditions: In a Mediterranean like climate (as exists in Israel) it is recommended to cultivate in a greenhouse during the winter, and under a high shade net (50%) in summer. The crop is sensitive to high temperatures



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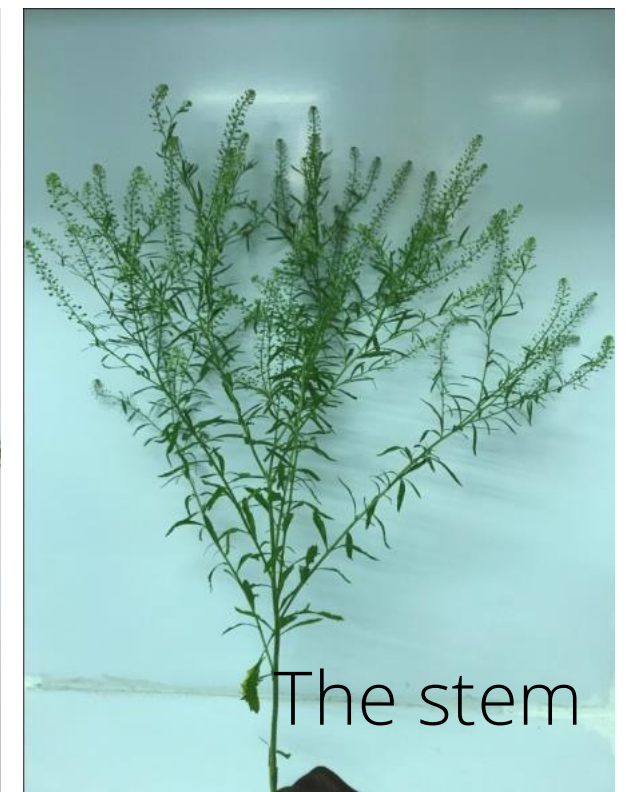
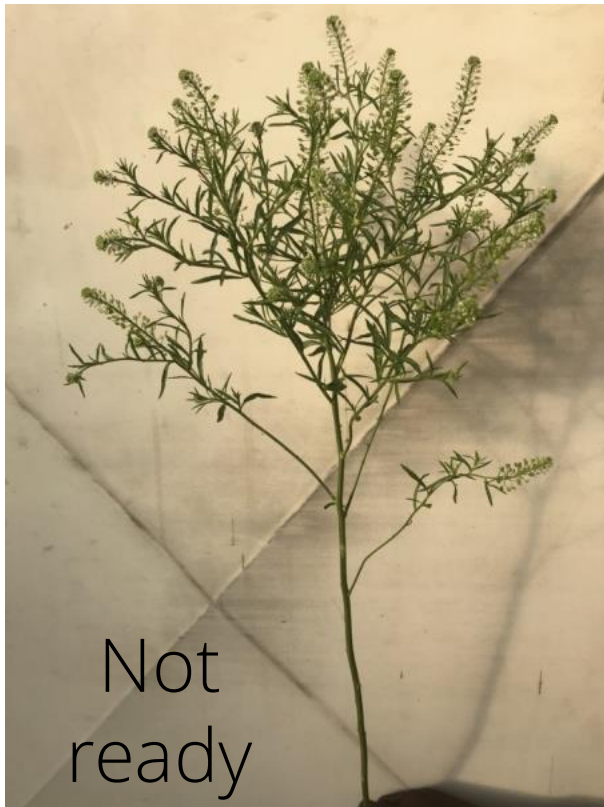
Shading / not shading

- Lepidium is very sensitive to stress from various sources and responds by flowering early and/or leaf senescence
- Generally speaking, sunlight is beneficial for good growth but under stressful conditions the use of shading should be considered



The Harvest stage

- Allow side branches to be developed, let the fruits develop in order to get a rich display.



Harvest and post harvest

- Harvest when weather is cool, preferably in the early morning
- Stems should immediately be placed in a Pre Treatment solution (we recommend **TOG Galileo** by Gadot Agro ([Link](#)) which contains a bacterial growth inhibitor, Citric Acid and surfactants and is kept at pH 4 to 5
- Remove the lower leaves of each stem and bunch 25 stems together
- Transport the stems in the buckets with the solution to the pack house



Lepidium GREEN DRAGON™

Cultivation Highlights



Harvest stage: When the inflorescences at the lateral branches are fully developed with lengths of approximately 15cm

Post Harvest: Use a solution containing:

- Benzyl Adenine (we recommend using TOG-L-101 by Gadot Agro at 0.5%)
- STS at 0.3%
- A Hydrator (we recommend using TOG₃ by Gadot Agro at 0.15%)

Pests: Look out for:

- White Fly
- Spider Mites
- Thrips

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Post harvest treatment

- In the pack house, dip the stems into a 5% solution of **TOG L-101** (by Gadot Agro, containing 10 gr/L *6-Benzyl Amionopurine* and stability surfactant) or any alternative chemical, until fully immersed
- Hold the stems over the trough for 1 minute to allow excess solution to drip off , then return bunches to the buckets with the **Galileo** solution



Packing & Maintaining the Cool

- Grade the flowers while still wet and return to the **Galileo** solution
- Leave flowers in buckets at room temperature for few hours to dry out
- Place the buckets with the stems in the cold room at 2°C to 4°C for a minimum of eight hours after which the product is ready for



Climatic conditions

- Please note that this information is based on our experience growing **GREEN DRAGON™** in Kenya, and adjustments should be made for different climate conditions
- Following are the average climatic conditions during the cultivation

	OCT	NOV	DEC	JAN
AVG MIN TEMP	11.47 C	11.98 C	11.84 C	14.12 C
AVG MAX TEMP	29.53 C	30.03 C	30.79 C	31.79 C
AVG DAIRLY TEP	20.5 C	20.39 C	21.30 C	22.94 C
SUNNY+ CLOUDS	22 DAYS	14 DAYS	10 DAYS	4 DAYS
SUNNY DAYS	0 DAYS	0 DAYS	18 DAYS	16 DAYS
CLOUDY/RAIN	8 DAYS	13 DAYS	3 DAYS	10 DAYS
CLOUDY DRY.	1 DAY	3 DAYS	0 DAYS	0 DAYS
TOTAL RAIN	16mm	80 MM	5.5 MM	106.5 MM
HUMIDITY MIN.				



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