



TIMING **YOUR VEG** IN MULTI-TIER CANNABIS CULTIVATION

LET'S GET STARTED

The cannabis garden is filled with variables and measurements, but few factors carry as much influence over plant performance and yield as **veg timing**.

Especially in multi-tier environments, where space is limited and airflow is tightly controlled, understanding how long to keep plants in the vegetative stage—and at what height—is one of the **most powerful decisions** a grower can make.



Unlike outdoor cultivation, indoor growers control every environmental variable.

One of the biggest levers at your disposal is the **length of time** a plant remains in its vegetative state under an **18-hour photoperiod**. During veg, the plant builds its structural foundation, developing shoots, roots, and energy stores to determine how it performs when flipped into flower under a **12-hour light cycle**.



WHY VEG TIMING MATTERS



But here's the rub: plants don't just stop growing the day they're flipped into flower.

Most cultivars go through a significant **"stretch" phase** during the first two to three weeks of the flowering cycle, during which they can double or even triple in size. And in a multi-tier facility where the distance between tray and light might be only 5 to 6 feet, mistiming your veg leads to a **domino effect**: plants grow into lights, airflow gets restricted, microclimates form, pathogens thrive, and yields suffer.

DIALING IN THE RIGHT VEG LENGTH



The “standard” veg period in a commercial indoor setting is typically around **10 to 14 days**. But in practice, that range varies dramatically based on:

- Genetics
- Environment
- Irrigation strategy
- Substrate size
- Facility goals

While 10 to 14 days is ideal in well-optimized grows, many facilities still veg for **21 days or more** due to environmental limitations, plant stress, or simply out of habit.

With the proper adjustments to **vapor pressure deficit (VPD)**, substrate choice, and irrigation schedule, some operations have cut veg time in half without sacrificing yield.



GENETICS MATTER MORE THAN YOU THINK...



Not all cultivars stretch equally in flower. Some, like **Mimosa or Zkittles**, grow slowly in veg but stretch aggressively when flipped. Others behave the opposite way. Knowing your genetics is essential to mapping out your veg and flower timelines.

In some facilities, growers handle finicky strains like Mimosa by taking cuttings a week earlier than the rest of the cohort and vegging those longer. That way, even though Mimosa requires three weeks of veg while the rest of the cultivars get two, they all end up on the same flowering timeline—harvested together in sync.

That kind of **strategic scheduling** helps maximize throughput while accommodating cultivar diversity.



CONTINUED

Consider **Miracle Alien Cookies (MAC)**, a famously slow-vegging cultivar. It requires longer veg to achieve sufficient structure.

Growers might want to adjust the substrate size, dial in environmental conditions—especially VPD—and shave off a week of veg time. That's a massive **gain in operational efficiency**.

STRETCH: THE GROWTH CURVE YOU CAN'T IGNORE

Once flipped into flower, cannabis plants enter a **stretch period** that lasts two to three weeks. Depending on the cultivar, this period can lead to a **doubling or tripling of plant height**. If not accounted for, this vertical growth quickly becomes a liability.

Simply put, allowing your plants to get too tall is not just a spatial problem—**it is an economic one.**

WHY?

- Plants grow into lights, causing photobleaching.
- Tall plants block airflow, forming hot, humid pockets that harbor powdery mildew.
- Tall plants require more defoliation and training, resulting in higher labor costs.
- Uneven canopies lead to inconsistent light distribution and lower overall yields.



ENVIRONMENTAL STEERING: USING TEMPERATURE TO TAME STRETCH

One underutilized tool to manage stretch is **temperature differential**—or “**DIF**.” Developed in floriculture research by Dr. Royal Heins of Michigan State University, DIF refers to the difference between day and night temperatures.

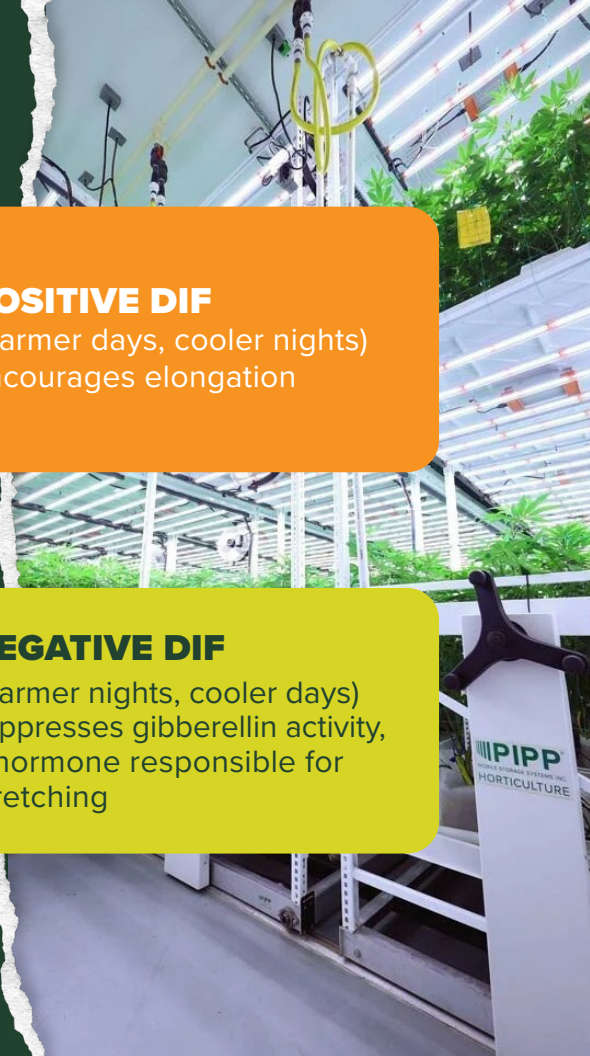
In cannabis, applying a slight negative DIF during the first few weeks of flower can significantly **reduce stretch**. That means lowering your daytime temps and slightly raising your nighttime temperature by 5 to 8°F. It's a subtle shift, but one that's been shown to make a measurable difference in plant structure.

POSITIVE DIF

(warmer days, cooler nights)
encourages elongation

NEGATIVE DIF

(warmer nights, cooler days)
suppresses gibberellin activity,
a hormone responsible for
stretching





FREQUENT, HIGH-VOLUME IRRIGATION

promotes vegetative growth

SHORTER, LESS FREQUENT PULSES WITH HIGHER DRY-BACK RATES

encourage generative responses,
such as tighter internodes and
controlled stretch

IRRIGATION STRATEGY & SUBSTRATE SELECTION

Stretch isn't just a product of genetics and temperature. How you irrigate—especially during early flower—sends powerful signals to the plant. This is where **crop steering** comes in. By using generative cues in early flower (lower water content, fewer irrigations), growers can help curb excessive elongation.

But this all starts in veg. **Oversized containers** in the veg room delay root establishment. That leads to longer veg times and weaker structural development. Downsizing substrate size can help roots fill the medium faster, accelerating shoot growth and shortening veg duration.

Of course, there are other physical ways to manage stretch: topping, super cropping, low-stress training, and trellising. These all work. But they're labor-intensive. In a lean facility, training 2,000 plants by hand isn't sustainable. That's why dialing in **veg height, stretch control, and substrate size** remains a more scalable solution.

NO-VEG STRATEGIES

In Europe, there's a growing trend toward skipping veg altogether. The "no veg" model involves taking rooted clones and **moving them directly into flower**, sometimes after just one day under an 18-hour light cycle. It's all about maximizing canopy square footage with a **high planting density**.

This approach only works if the plant count isn't **legally restricted** (e.g., in some U.S. states, it would be illegal). But it's gaining traction for its efficiency: fewer grow stages, no need for a dedicated veg room, faster harvest cycles. The tradeoff? **Increased labor** at transplant and harvest. And you'll need to maintain tighter environmental control across a more uniform canopy.

HOW HIGH?

32 plants on a 4'x8' tray = 1 plant per square foot

64 plants on a 4'x8' tray = 2 plants per square foot





KEY TAKEAWAYS

DON'T FORGET!

- Veg timing is key in managing plant height, uniformity, and stretch in multi-tier environments.
- Each cultivar responds differently—know your genetics and plan accordingly.
- Use DIF (day/night temp differentials) and an early flower irrigation strategy to manage elongation.
- Optimize substrate size and root zone hydration for faster veg cycles.
- High-density no-veg strategies may be viable for advanced growers or unique facility constraints.

In vertical cannabis cultivation, **space is money**. And in a world of tight margins, better veg timing is imperative for business.

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