

Tunnel Automation

For Market Gardeners



A person wearing a dark cap with a gold 'R' logo and sunglasses is smiling while standing in a greenhouse. They are surrounded by lush green tomato plants with yellow flowers. The background shows the white structure of the greenhouse.

Doubling your Yields

Is easier than you think

**How much
do YOU get
from a
tunnel ?**



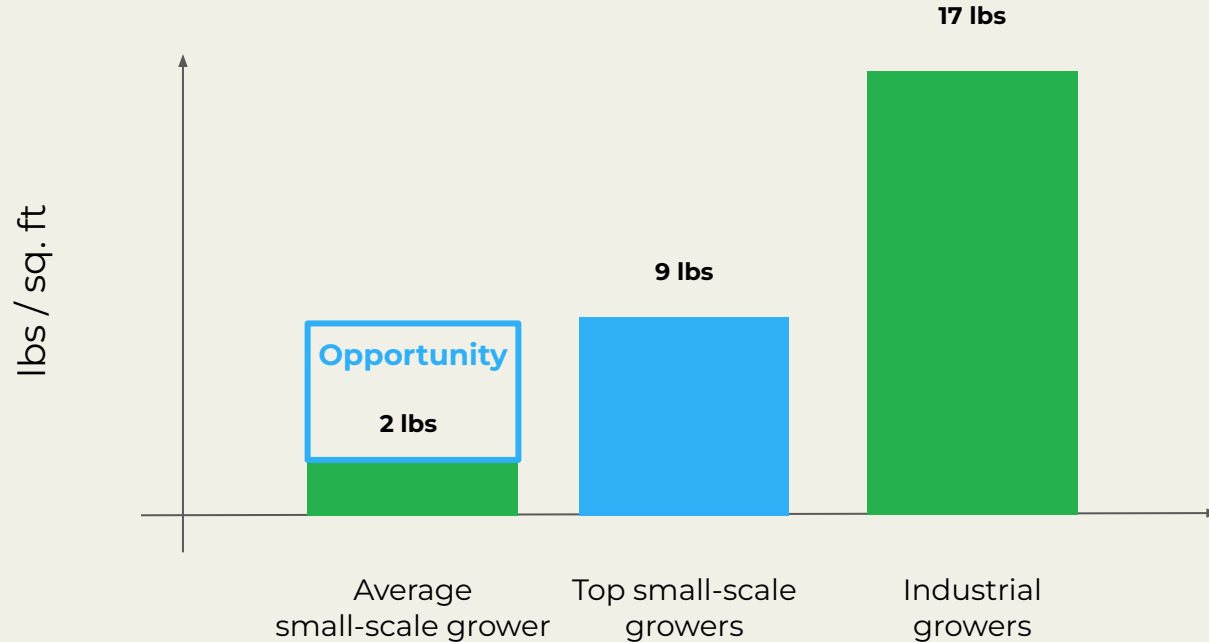
\$6

Per sq. ft

\$18,000

Per 30x100'

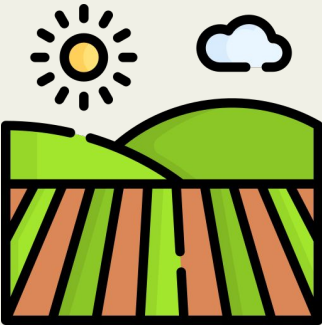
Tomato Yields





+1 lbs/sq. ft
= \$1,800/bed

Heated & Unheated Tunnels



3x



3x



+ \$20,000

+ \$10,000



How You Do It

Using tunnel automation



Avoid Losses



15%

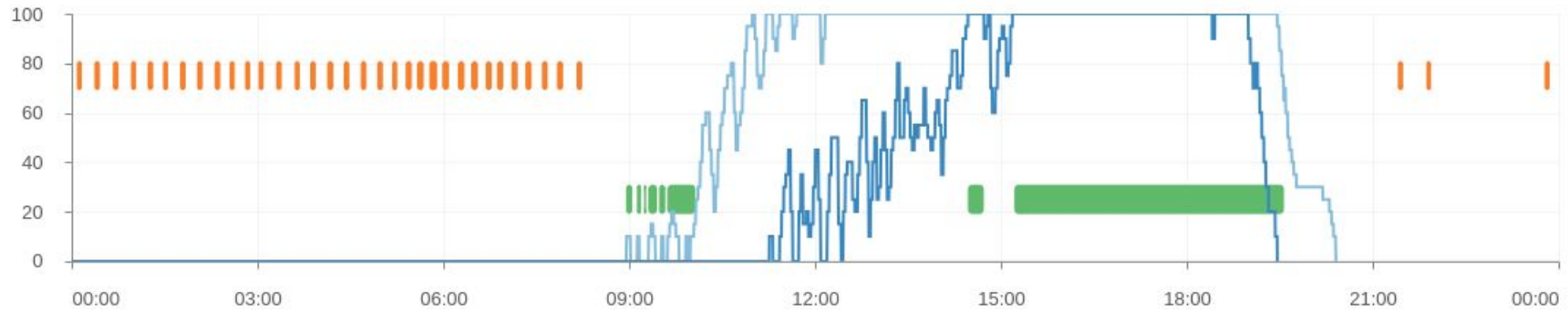
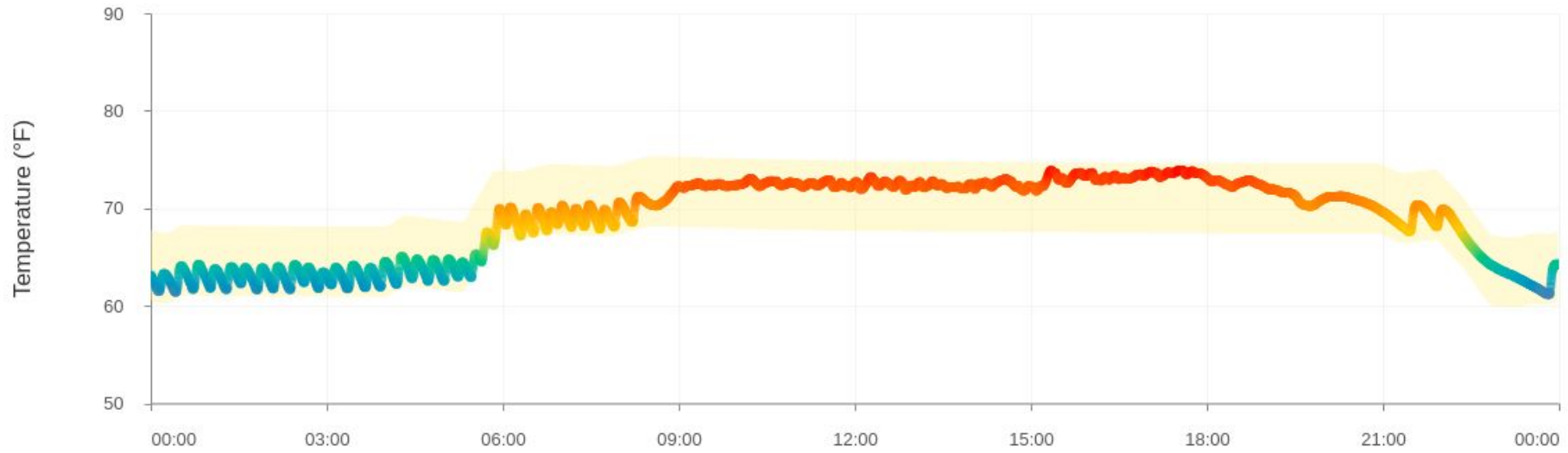
**loss per blossom
drop**

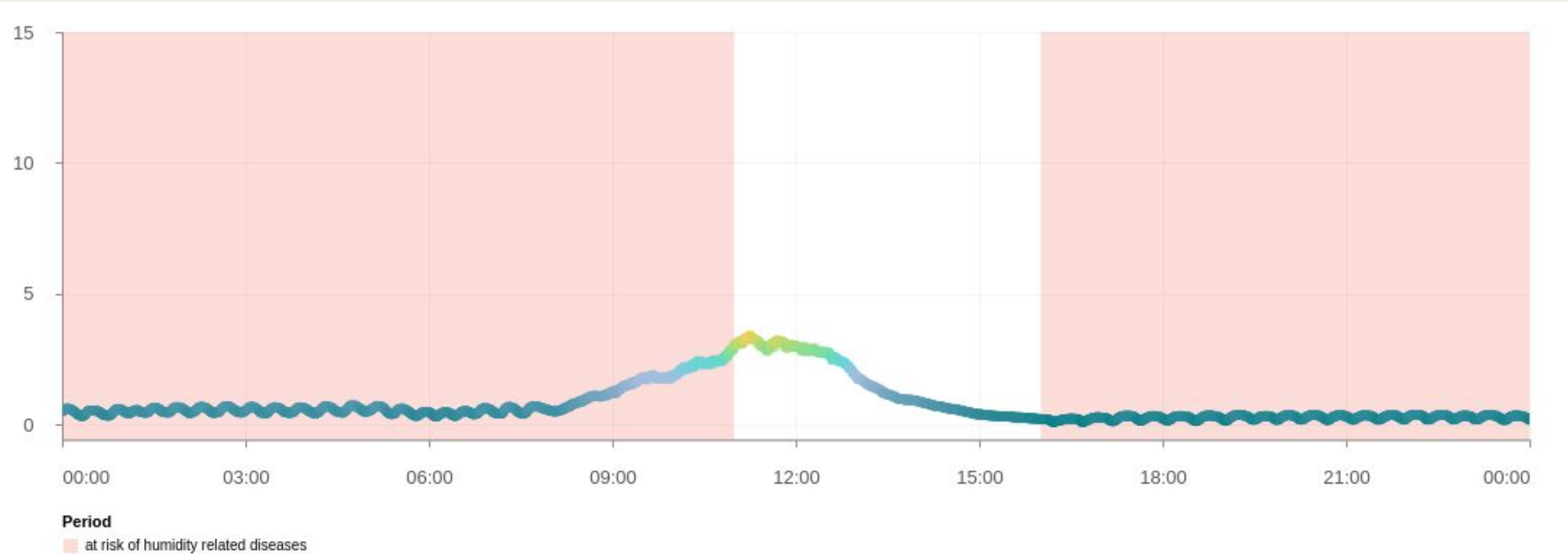


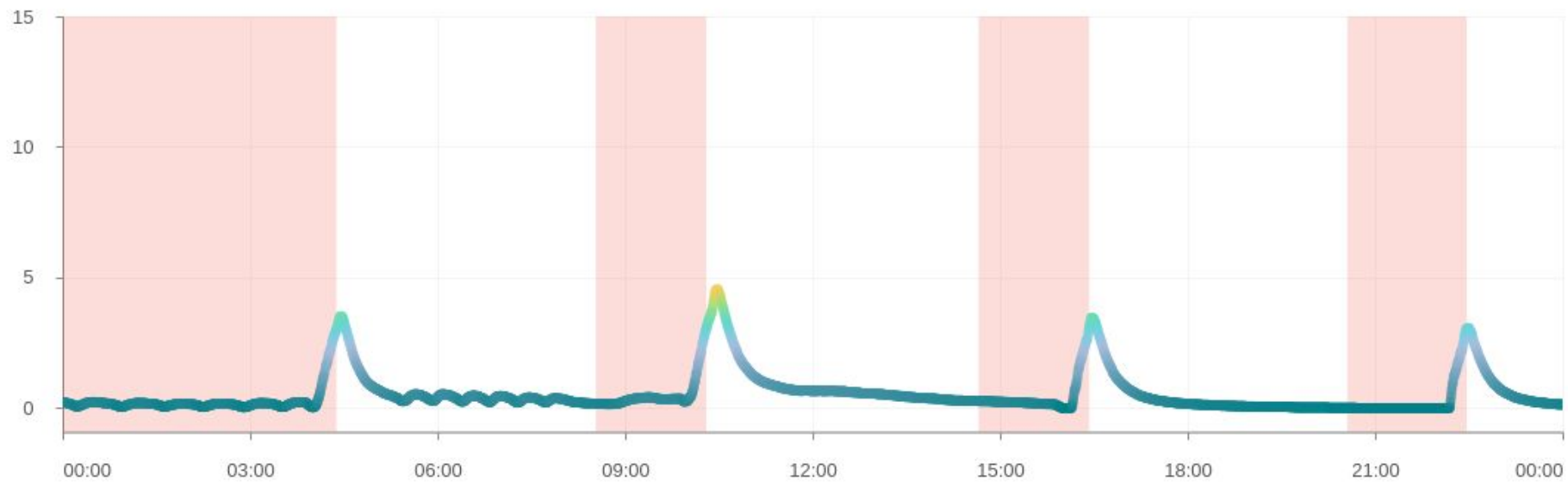
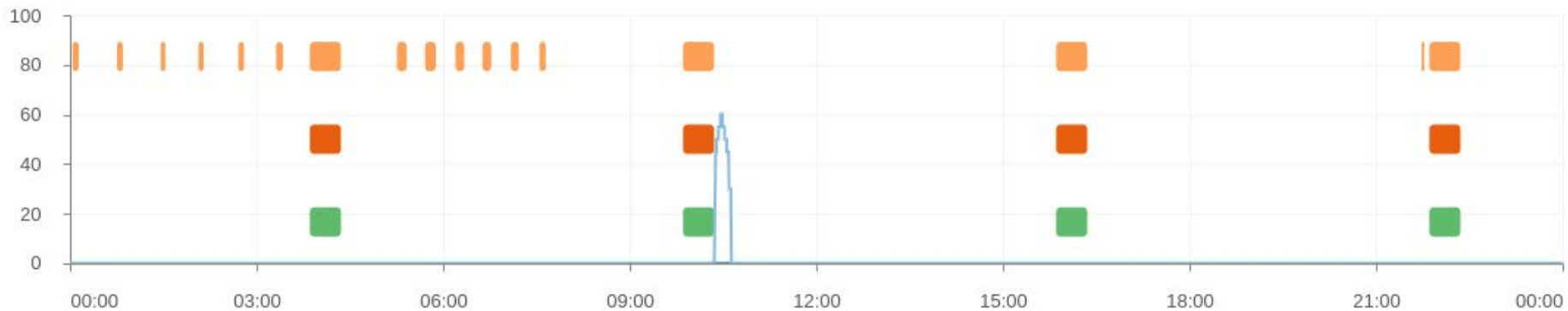












Period

at risk of humidity related diseases





**Capture Every Bit of
Possible Growth**



50%

**Growth can be
stolen by cold
shock**

“

I managed to **get my cucumbers to market on May 31st this year.** Usually, they're ready **mid-June.**

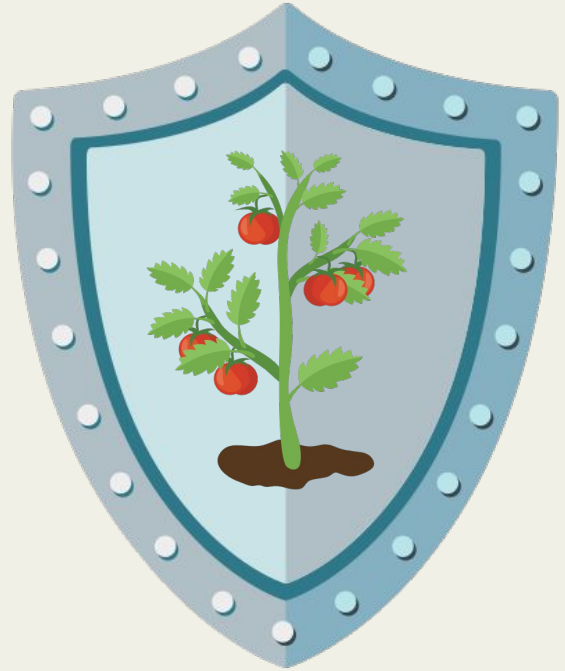
Automation has helped me retain heat in my unheated greenhouse and helped avoid transplant shock.”

Kevin

Amelot Farm

Protection Mode

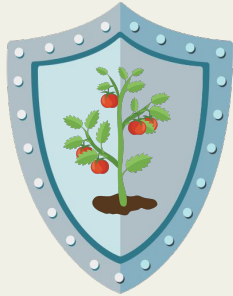
- The plant preserves itself
- Everytime, it stops growth
- Hours of wasted sunlight





**How do
you see it ?**

Dehydration



80%

of crops come from the
nursery





Bell Pepper

With timer

Irrigation duration

1 min

Valve

Valve 3

Starting times



8:00

8:00

8:00

9:30

10:00

12:00

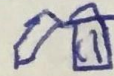
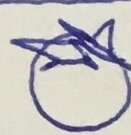
11:00

12:00

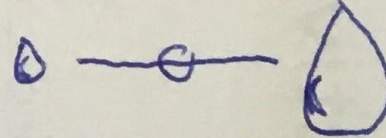
12:30

14:00

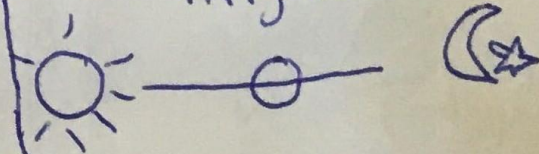
enregistre



Section
quantité d'eau



Heure de dernière
irrigation



4 drip tapes per planche

Sable



**Want to get
concrete tricks ?**

**Maximize your Greenhouse
Income**



By Antoine Ratheau
Market Gardener





**Keep harvest high
all season long**



Energy Produced

- Number of leaves
- Density
- Moment of year
- Weather



Energy Consumed

- Number of fruits
- Temperature

**Too Cold...
you lose growth**

Source : Production de la tomate de serre au Québec

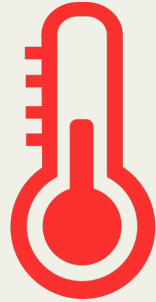
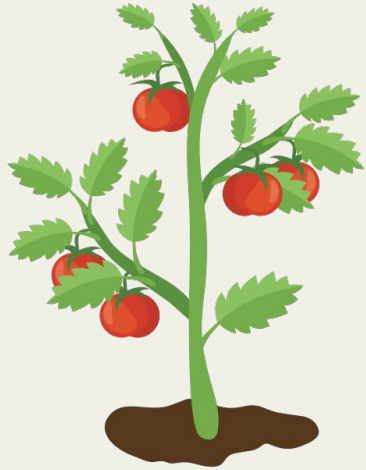


**Too warm...
you exhaust your
crop**

Source : Production de la tomate de serre au Québec







Plants Vigor ?



Weak



**Want to get
concrete tricks ?**

**Maximize your Greenhouse
Income**



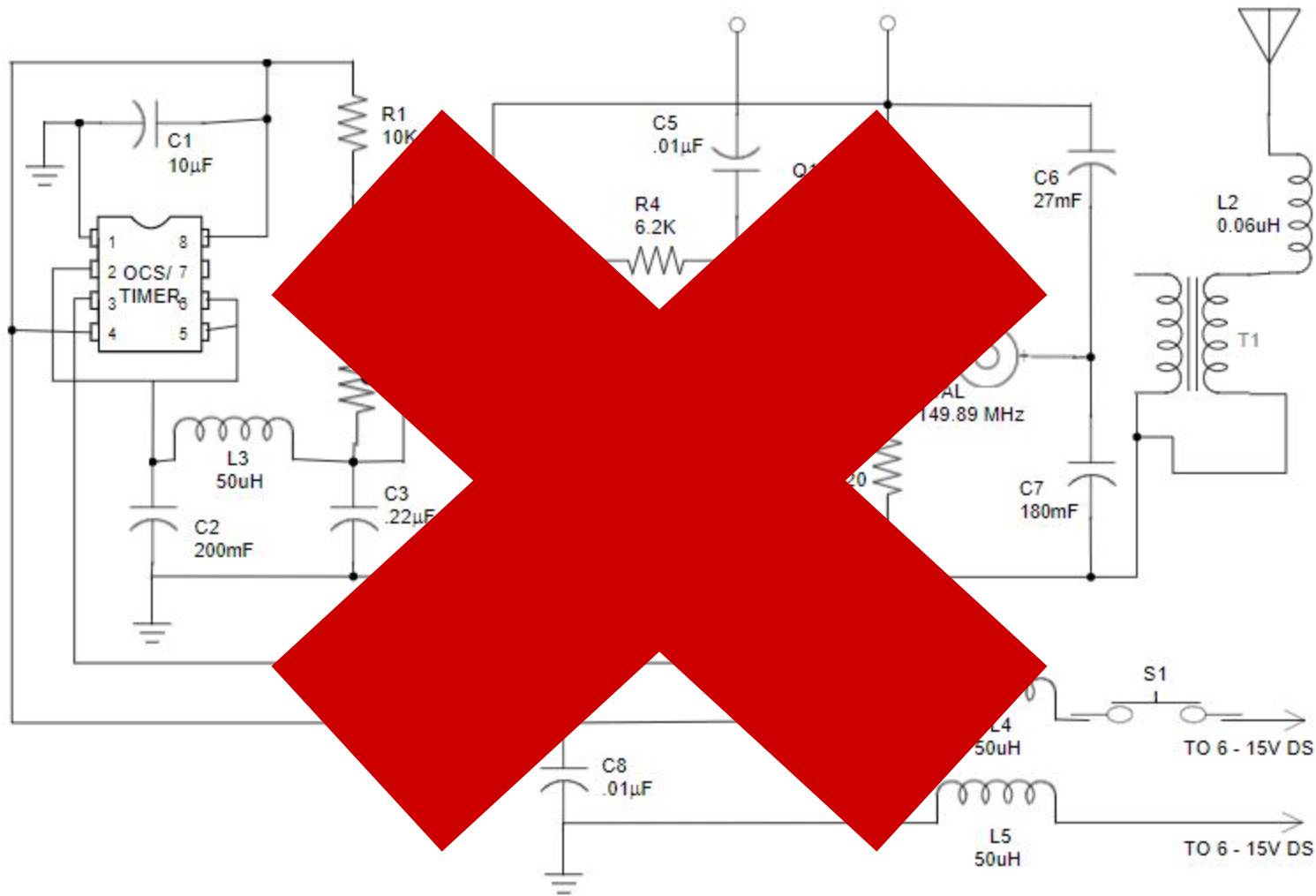
By Antoine Ratheau
Market Gardener



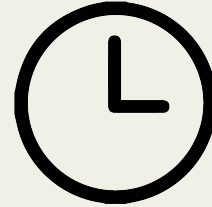


Is It Complicated ?





What you need



2 hours

No WiFi needed



Wrapping Up

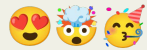
Before adding a new house





As of today [August 30th], we have **DOUBLED tomato production** compared to last year.

That's more than 2000 pounds of tomatoes harvested this summer



Of course, there is a lot to get better at.



Drew

Ghost House Farm, Michigan

**Who has gotten something useful
out of this talk ?**

**Want to get
concrete tricks ?**

**Maximize your Greenhouse
Income**



By Antoine Ratheau
Market Gardener



A person wearing a dark cap with a gold 'R' logo and sunglasses is smiling while standing in a greenhouse. They are surrounded by lush green tomato plants with yellow flowers. The background shows the white structure of the greenhouse.

Doubling your Yields

Is easier than you think

**Need help
with your
growing
conditions ?**



guillaume@orisha.io