



PLANT ANALYSIS · PHYTOSENSE

French case study with PAM system

What your crop told us — and what we learn from it.

23 / 03 / 2026

Science. Technology. Results.





01
GREENHOUSE 1

Joannax XR

Diameter sensor · course of growth, stress and recovery

DIAMETER SENSOR

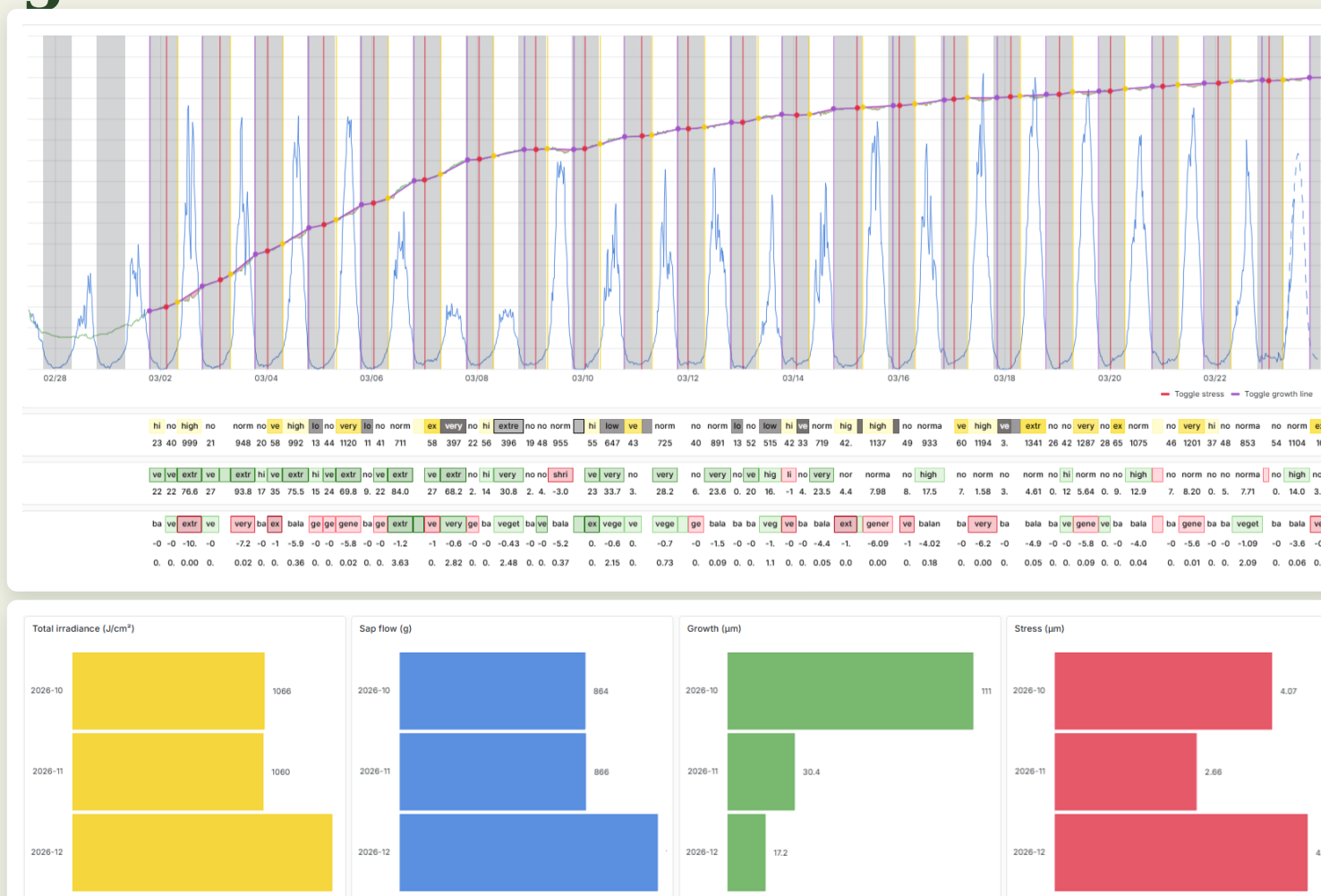
The expected pattern



As expected, we see a gradual decline in growth — the starting point for our further analysis.

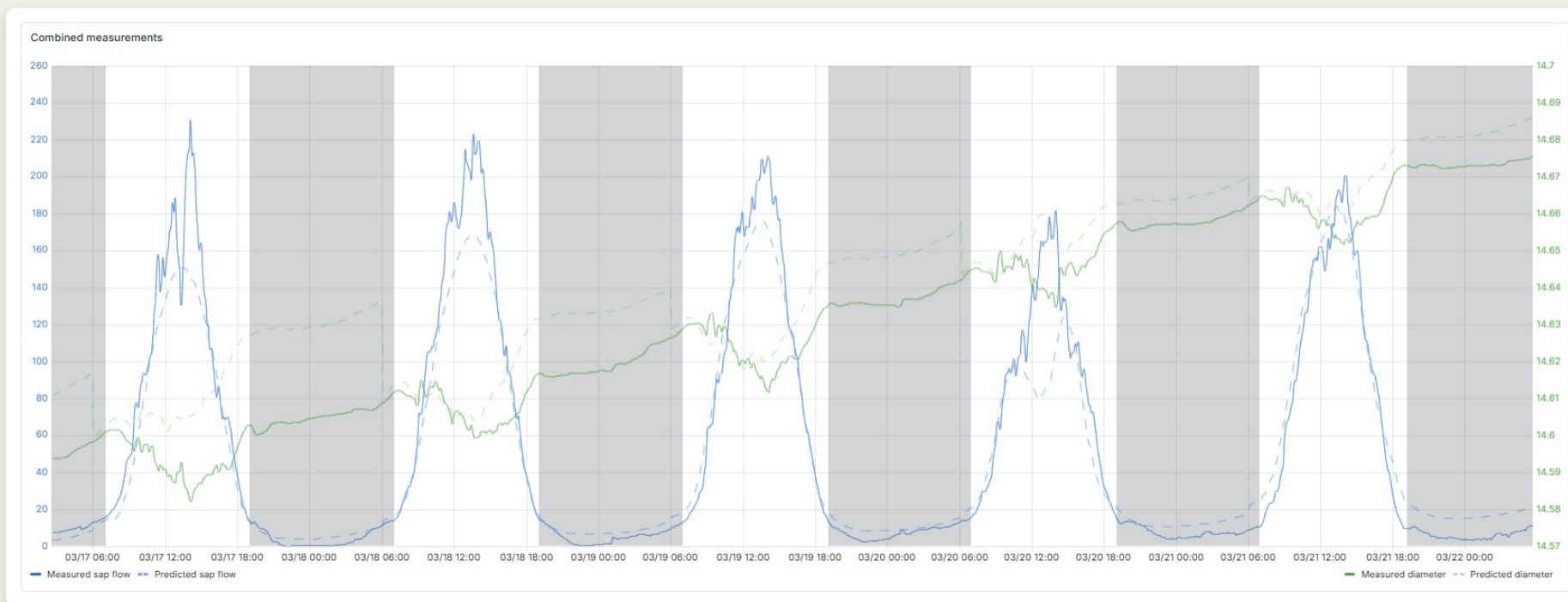
DIAMETER VS. CLIMATE

Decline in growth confirmed



IRRIGATION & CONTROL

Diameter decline before the first irrigation



The diameter decreases before the first irrigation → consistent with a generative control strategy.

PERIOD 18/03 - 21/03

Slight swelling before noon



What we see

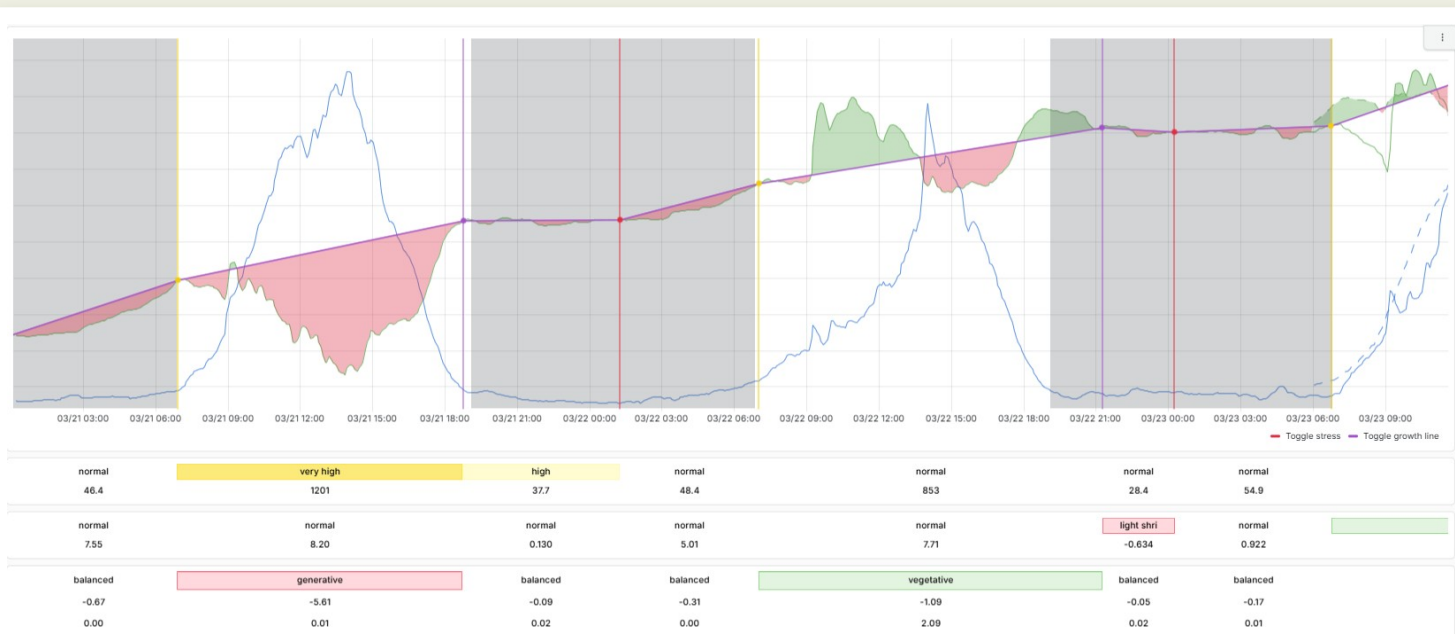
A small swelling early in the day. This suggests that the build-up towards drain is slower than desired.

Advice

Don't lower the drain, but possibly delay it — this keeps the plant balance on track.

21/03 · 22/03 · 23/03

Response to irrigation in detail



- Swelling on 22/03 due to a slower increase in activity.
- Stress in the afternoon.
- 23/03: stronger response to the first irrigation, with higher EC.

Conclusion: the swelling on 22/03 is hard to reduce — irrigation had already been lowered.

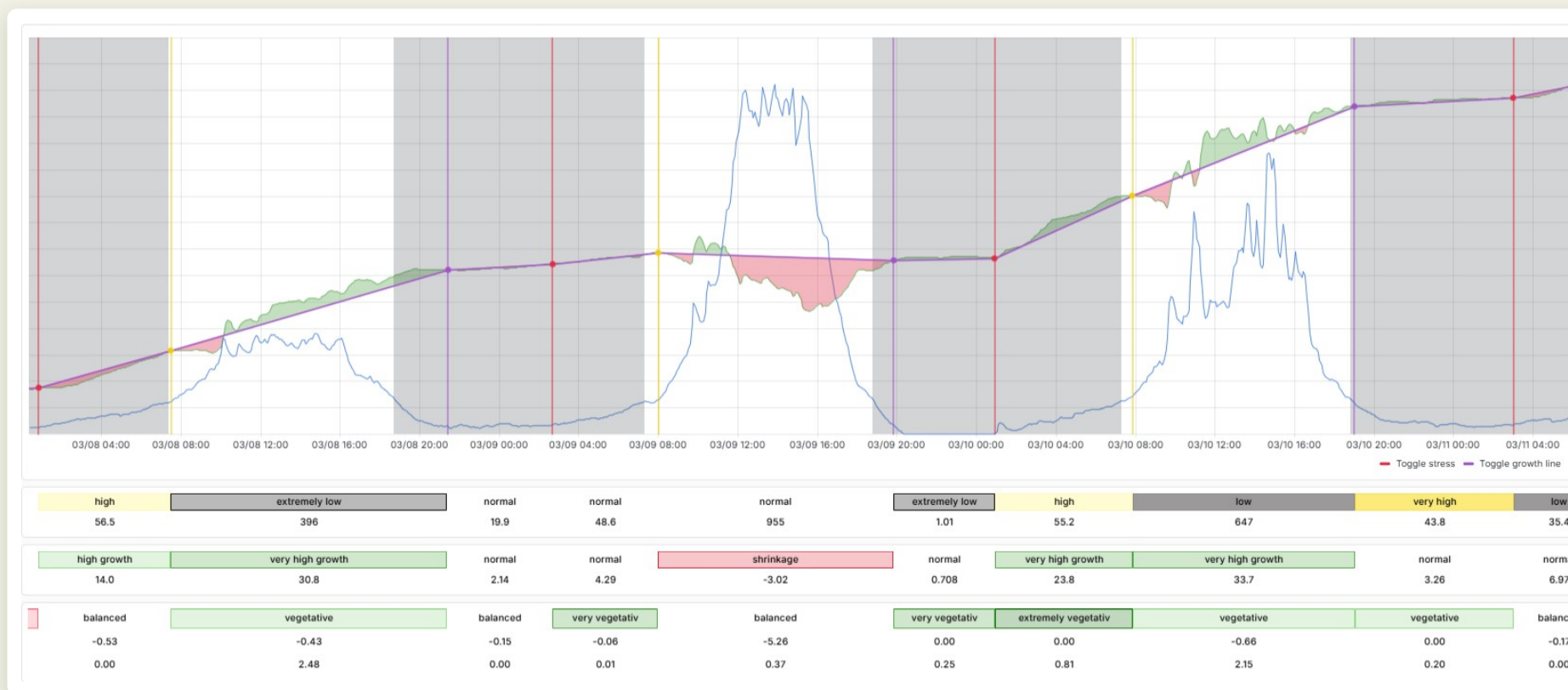
REFERENCE DAY 9/03

Looking back at 9 March



9/03 · AROUND 1:00

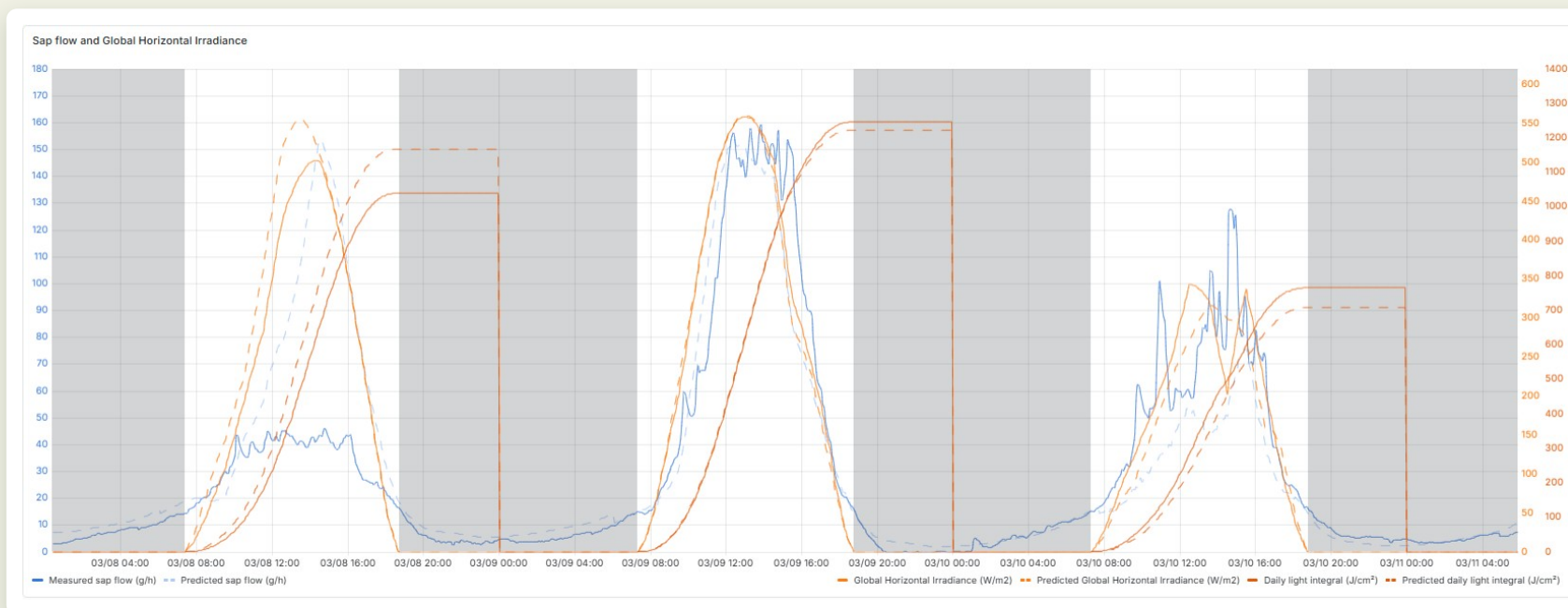
More difficult recovery



Recovery around 1:00 is more difficult — possibly a combination of climate and irrigation.

ACTIVITY VS. RADIATION

More activity — not yet explained



The higher activity cannot be explained by our solar radiation data — a point to follow up.



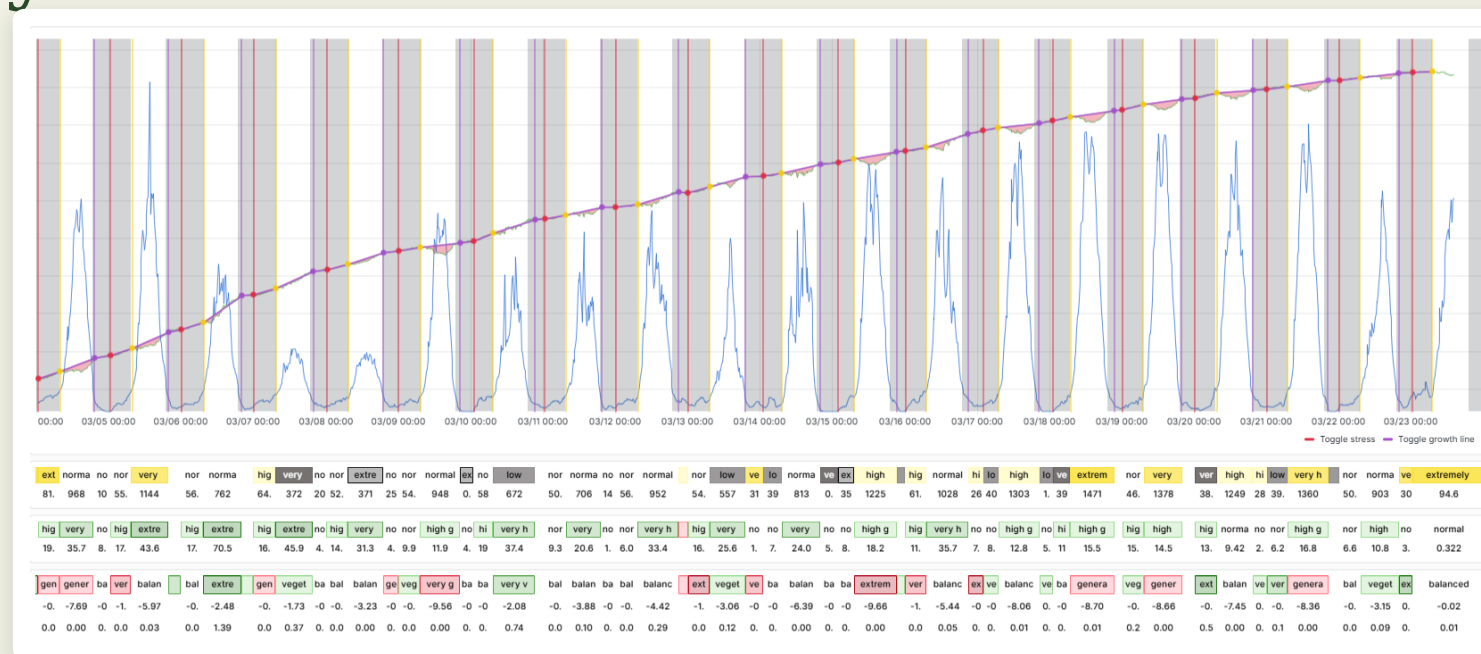
02
COMPARTMENT 5

Dulciz Baby

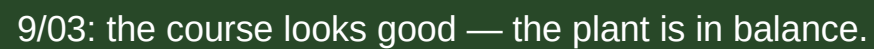
Compare the swelling behaviour with that of Joannax

DIAMETER & ACTIVITY

DulcizBaby in view



A healthy course



22/03 · COMPARISON

Smaller swelling than in Joannax



On 22/03, DulcizBaby swells clearly less than Joannax — a more favourable signal.



03

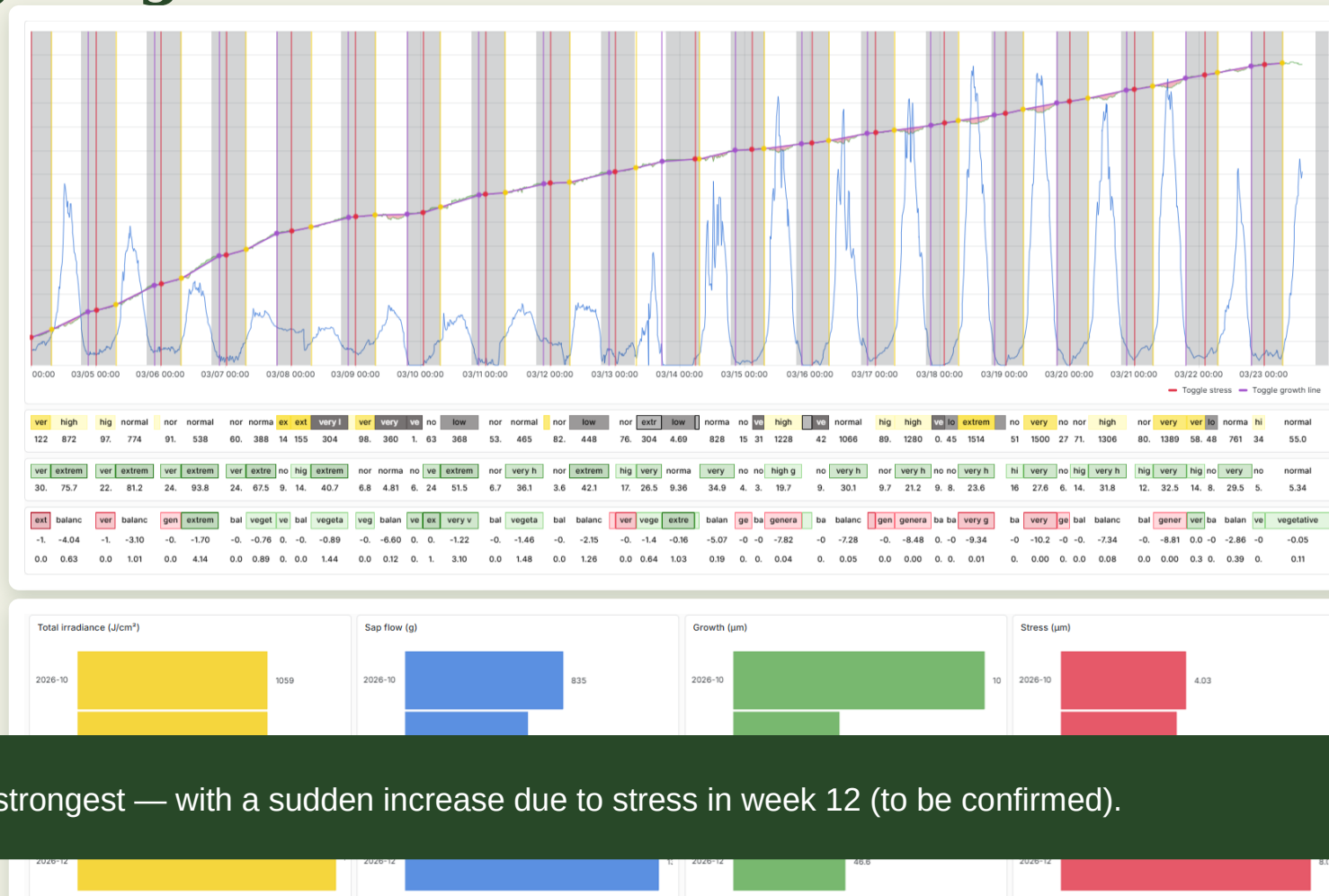
COMPARTMENT 7

Beef **steak**

The strongest grower of the three varieties

GROWTH & STRESS

The strongest growth of the three



Beefsteak grows the strongest — with a sudden increase due to stress in week 12 (to be confirmed).



NEXT STEPS

From data to **decision**

- Joannax XR — monitor swelling and stress; delay the drain rather than lowering it.
- DulcizBaby — favourable, smaller swelling; keep the current control strategy.
- Beefsteak — strongest growth; further confirm the stress peak in week 12.

Book a follow-up call

Science. Technology. Results.