CANNA SUBSTRA

CANNA SUBSTRA Vega and Flores is the hydroponic nutrient especially developed for systems in which the drainage water is not returned to the nutrient tank but drains away (Run-to-Waste / Open Hydroponic systems).

Balanced Nutrient Line

CANNA SUBSTRA has a balanced quantity of all required major and minor elements needed by plants. Substrates used in run-to-waste systems are mostly inert (they don't add or take nutrient elements from the nutrient solution). That means plants are 100% dependent on the nutrients provided in the irrigation water.

Hard & Soft Water version

The composition of tap water differs per area. Because the irrigation water used is usually based on tap water CANNA optimized its products by developing Hard and Soft water versions of the SUBSTRA nutrient line. This ensures the exact amount of nutrients, in the correct ratios, will be delivered to the plant's root system, with as little as possible of these nutrients ending up in the drain water; healthy for the consumer and great for the environment.

CANNA SUBSTRA is one of the cornerstones that have helped CANNA to become world market leader.



Grow Schedule







	SUBSTRA										
		Cultivation period	Light / Day In hours	mi/	mi/	ml/	CANNAZYM ml/ Gallon	ml/	T PK 13/14 ml/ Gallon	EC +	PPM +
	VEGETATIVE PHASE	In weeks		Gallon	Gallon	Gallon	Gallon	Gallon	Gallon	Gallon	
GROWTH	Start / rooting (3 –5 days) Make substrate wet	<1	18	4-8	•	15	•	•	•	0.7 - 1.1	520-810
	Vegetative phase I Plants develop in volume	0-3 ¹	18	6-10	·	8	10	•	·	0.9-1.3	670-960
Γ	Vegetative phase II - Up to growth stagnation after fructification or appearance of the formation of flowers	2-4 ²	12	8-12	•	8	10	8 ⁵	•	1.2-1.6	890-1180
FLOWERING	GENERATIVE PHASE Generative Period I - Flowers or fruits develop in		_		_		_	_	_	_	
	length. Growth in height achieved	2-3	12		10-13	2	10	8-15	•	1.4-1.8	1040-1330
	Generative period II - Development of the volume (breadth) of flowers or fruit	1	12	•	10-13	2	10	8-15	6	1.5-1.9	<mark>1110-1410</mark>
	Generative Period III - Development of the mass (weight) of flowers or fruit	2-3	12	•	6-10	2	10	8-15	·	1.0-1.4	740-1040
L	 Generative Period IV - Flowers or fruit ripening process 	1-2	10-12³	•	•	•	10-19 ⁴	8-15	•	0.0	0.0

- 1. This period varies depending on the species and number of plants per m². Mother plants remain in this phase until the end (6 – 12 months).
- 2. The changeover from 18 to 12 hours varies depending on the variety. The rule of thumb is to change after 2 weeks.
- 3. Reduce hours of light if ripening goes too fast. Watch out for increasing Relative Humidity
- 4. Double CANNAZYM dosage to 19 ml/gallon, if substrate is reused.
- 5. 8 ml/gallon standard. Increase to a maximum of 15 ml/gallon for extra flowering power
- EC: EC+ value is based in mS/cm when EC water = 0.0 by 25°C, pH 6.0 Add the EC of the tap water that is used to the recommended EC! The EC total in the example is with tap water with an EC of 0.4

pH: Recommended pH is between 5.2 and 6.2 Adding pH- can increase EC. Use pH- grow in the vegetative phase to lower the pH Use pH- bloom in the generative phase to lower the pH

PPM: PPM+ value is based on 0.74 conversion factor.

The guidelines in the table aren't an iron law, but can help novice growers to develop a sophisticated fertilization strategy. The optimum fertilization strategy is further determined by factors such as: temperature, humidity, plant species, root volume, moisture percentage in substrate, water dosage strategy, etc.

CANNA Thé solution for growth and bloom

Make your personal growschedule at www.cannagardening.com