

# Hademar's need for balance

## Addendum to the cultivation manual everbearing strawberry varieties

The strawberry variety Hademar is very productive with little need for crop maintenance. However, the high productivity comes with a risk. Occasionally, mainly during the period of the third flush, misshapen fruits develop due to a lack of energy and nutrition. Below you will read about the probable causes and solutions for this problem.

### Energy and nutrition

Periodically Hademar can experience a lack of net assimilates (energy) to support all plant processes at the desired level. The same goes for the level and content of the available nutrition. Energy and nutrition are needed for:

1. Sufficient growth and photosynthesis of leaves
2. Developing of trusses and fruits
3. High-quality flower initiation

The phenomenon of misshapen fruit is mostly seen during the third flush. Taking into account the amount of growing degree hours calculating back from the ripening of the fruit of the third flush, the cause of the phenomenon occurs during the first flush. If during the ripening of the first flush there are insufficient energy (assimilates) and/or nutrition available not all plant processes are well supported. As a result this could also impact the quality of flower bud formation and consequently the quality of related flushes. Our research on this matter is still ongoing but first signs clearly indicate that extra attention for the so-called plant balance is needed. In addition, water and nutritional stress should be avoided as much as possible.

### Stimulating vegetative growth

As of the first planting all should be focused to have sufficient photosynthesis during the first flush. This means a plant needs sufficient leaves and continuously produces new leaves.

By doing this the plant will have a solid basis to have sufficient energy (and a good reserve of assimilates) to support alle plant processes simultaneously. The number of leaves should be in balance with the amount of fruits growing and ripening on the trusses.

### Sufficient leaves

By rule of thumb for every two growing fruits a plant needs a minimum of 1 full grown tripartite leaves. When the number of growing fruits exceeds the amount of leaves, it is wise to remove (a part of) a truss.

The balance between fruit development and photosynthesis is not only in the interest of maximizing the fruit size and keeping the growth of the plant intact, but also then development of new trusses. More leaves allow a plant to have a greater intake and evaporation of water and as a result a higher intake of nutritional elements.

### Fertilization advice

The standard fertilization recipe of Hademar is the following:

mS/cm		mmol/liter								µmol/liter					
EC	K	Ca	K/Ca	Mg	NH <sub>4</sub>	NO <sub>3</sub>	Cl	S	P	Fe	Mn	Zn	B	Cu	Mo
1,4	3,60	3,60	1,00	1,20	0,80	10,00	0,00	1,60	0,80	50	20	12	15	1,50	1,50

Usually, everbearers are being cultivated at draining EC sum of 2.5. However, it seems that Hademar appreciates a slightly higher EC sum. A sum above 3.0 should be avoided since this could work contra productive due to salinization of the soil.

**Disclaimer:**

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