TECHNICAL INFORMATION

Strawberry fertilizers

Choosing the right soluble NPK blend for your situation

Background

Growing protected, “table-top” strawberries is a sophisticated and capital-intensive business. Attention to the detailed agronomic requirements of the crop is essential to produce a high quality, profitable crop. Providing the crop with correct nutrition through the irrigation system is an important component of production. The target levels of the various fertilizer nutrients are well established, and are described in detail according to the variety, the substrate, the crop stage etc. These feed targets are set to provide sufficient nutrition for the crop, and also the correct balance between the various nutrients. One important consideration is the ratio between the amount of nitrate nitrogen (NO_3-N) the crop is given relative to the amount of potassium (K).

Water quality

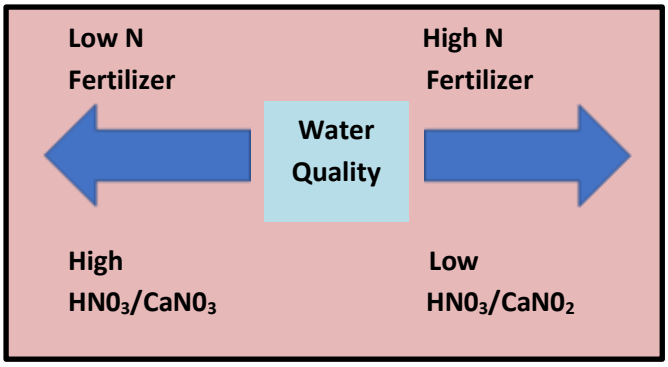
Water quality is a very important factor in the nutrition of strawberries.

The first consideration in planning the feeding of the crop is to ensure that the water pH is correct. If the pH is too high this requires the addition of mineral acids (usually nitric acid HNO_3) to bring the pH down to the optimal level for efficient crop production.

The second consideration is the availability of calcium (Ca) in the irrigation water. Strawberries require plenty of calcium and some of this may be available in the raw water. Otherwise, it is usually supplied as calcium nitrate through a separate dosing system.

How water quality affect fertilizer design

The control of pH and the provision of calcium are considered early on because – if required – both nitric acid and calcium nitrate will add nitrate nitrogen into the irrigation water. The “gratuitous” nitrogen coming from these two materials can sometimes be sufficient to provide all of the nitrogen that the crop needs, meaning that a “Zero N” fertilizer is required to grow the crop. More often, it is a matter of accommodating this gratuitous nitrogen by reducing the amount supplied in the fertilizer.



Selection of strawberry formulations

ID	N	P2O5	K2O
3977	0	14	36
3973	2	6	31
3967	5	13	26
3974	5	13	29
3969	6	14	30
3252	8	14	38
3972	8	9	33
3970	8	10	31
3968	9	18	31
3971	9	20	32
3978	10	10	31
3976	10	8	28
3462	15	7	29

Trace elements in strawberry fertilizers

The inert growing media used in strawberry production means that all the nutrients – both macro and micro - have to be supplied in the irrigation water. Deficiency diseases quickly appear if there is a shortage of any nutrient, even a micronutrient. Iron (Fe) is the micronutrient that is required in the largest amount, and deficiencies quickly show as chrome yellow leaves on the growing tips. Iron must be chelated to ensure it remains in stable solution and therefore available to the plant. Without chelation the iron will drop out of solution as an insoluble precipitate and iron deficiency will quickly appear. The coir growing media that is commonly used by growers requires use of the robust Fe-DTPA chelate to ensure full iron availability. All the trace elements are held together in the concentrated “stock tank” which growers commonly use to further dilute into the irrigation water. In this tank there is the risk of “preferential chelation” whereby the chelate migrates

from the iron to other unchelated metals such as copper (Cu), manganese (Mn) and zinc (Zn). If this occurs the iron is left unchelated and quickly precipitates. For this reason Solufeed always supplies all reactive trace elements in a fully chelated form so that stock tank solutions remain stable with all nutrients fully available to the plants.

Make to order service

Solufeed is expert at tailoring a fertilizer specifically to meet exact feed requirements for an individual situation. In other words, we can make you a feed that hits your feed targets exactly, taking into account your water quality, with no compromises. This is a routine operation for Solufeed and not a complicated, elaborate or expensive process. Contact Solufeed to discuss.

Benefits of a Solufeed blended strawberry fertilizer

- Convenient.
- Reliable.
- Accurate.
- Consistent product made with the best raw materials.
- One product to purchase, measure and use.
- No management time lost to making up feed solutions.
- Can be mixed and used at remote growing stations.

General information

Packaging: 20 kg

Technical service: For further information, assistance and access to The Solufeed Advisory Service, please contact Solufeed at the address below.

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Important

The information in this document has been prepared carefully and is provided in good faith. The application, use and processing of any material together with regulatory compliance is the absolute responsibility of the Buyer. All technical information or other advice provided by the Seller in any form is given without warranty to the full extent provided by law.

Please note that products may differ or be unavailable in certain territories.

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