

# Science shows that plants need iodine

The application of Sangral®ine potassium nitrate conveniently and adequately ensures the iodine supply to fertigated crops in order to maximize crop yield and quality, and improves plant resilience to environmental stress.



Improved root growth



Optimal nitrogen metabolism



Improved canopy development and branching



**Optimal photosynthesis** 



Improved tolerance to oxidative stress



Improved flowering and fruit quality



Improved calcium concentration in the fruit and better shelf life

### **Potassium** An essential nutrient The preferred for yield and quality

- · Promotes the production of proteins
- Promotes photosynthesis
- Intensifies the transport and storage of carbohydrates
- Improves uptake efficiency of N fertilizers
- Improves water use efficiency
- · Promotes lycopene synthesis

## Nitrate nitrogen source

- Non-volatile
- Promotes the uptake of cations (K<sup>+</sup>, Ca<sup>++</sup>, Mg<sup>++</sup>)
- · Nitrate is readily absorbed by the plant
- · Nitrate limits the uptake of chloride
- · Efficient conversion to amino acids in the leaves

## Benefits of **Sangral®ine Potassium Nitrate:**

Root growth	More and better developed primary and secondary roots     Improved active uptake of water and nutrients
Nitrogen conversion	<ul> <li>Optimized conversion of nitrate to proteins</li> <li>Reduced cell damage by reactive oxidized nitrogen forms</li> </ul>
Plant growth (above ground)	<ul> <li>Increased growth rate of above ground biomass</li> <li>Increased yield</li> <li>Earlier harvest</li> <li>Improved stem branching for a better interception of light</li> </ul>
Photosynthesis	<ul> <li>Higher concentration of chlorophyll</li> <li>Better conversion of solar energy to chemical energy</li> <li>Increased conversion of CO₂ to sugars</li> </ul>
Tolerance to abiotic stress	<ul> <li>Higher level of antioxidants like vitamin C and polyphenols</li> <li>Mitigating loss of production from adverse environmental conditions</li> </ul>
Flowering and fruit quality	Better fruit set, leading to more uniform fruit size     Better colour and earlier ripening of fruits with a higher sugar content
Fruit rot and shelf life	<ul> <li>Less fruit rot and enhanced shelf life by increased Ca concentration in the fruits</li> <li>Improved water transport by better photosynthesis and root function, increases translocation of calcium to the fruits</li> </ul>

## Properties of Sangral®ine Potassium Nitrate



Sangral®ine Potassium Nitrate is an indispensable component in well-balanced nutrition programs for fertigation of crops, grown in soil or hydroponic

Sangral®ine Potassium Nitrate ensures an adequate supply of iodine in the nutrient solution.

Specifications of Sangral®ine Potassium Nitrate		
Nitric nitrogen (N-NO <sub>3</sub> -)	13,7% min	
Potassium oxide (K <sub>2</sub> O)	46,3% min	
Solubility (g/l at 20°C)	316	
Insolubles	< 0,02%	
EC (1 g/l at 25°C, in mS/cm)	1,35	
Colour	white	

Ask your local SQM agronomist for a specialty plant nutrition programme in accordance with your local needs

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