# LALSTIM OSMO

## For increasing yield and quality for berry crops in open field and tunnel

LALSTIM® OSMO contains glycine betaine, an osmolyte naturally enhancing stress tolerance in plants. Glycine betaine is absorbed quickly by the plants, where it maintains the water balance and the normal activity of plant cells during environmental stresses. LALSTIM® OSMO increases the capacity of berry crops to produce yield during unfavorable temperature and moisture conditions, and improves the quality and shelf life of berries.





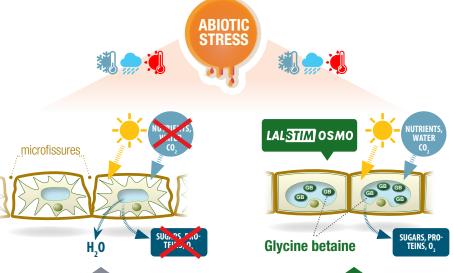
#### MODES OF ACTION

LALSTIM® OSMO protects the normal physiological activity of plant cells during stress conditions:

- Maintains the water balance and prevents cell damage.
- Enhances photosynthesis.
- Improves the circulatory flow of water and nutrients, especially calcium and other trace elements.

#### **BENEFITS**

- Prevents frost damage during the flowering stage
- Ensures growth and yield production during heat and drought stresses
- Improves the quality and shelf life of berries



### With the help of glycine betaine, normal cell metabolism and water balance are maintained.

#### **ADVANTAGES**

- Absorbed within 24 hours
- Circulates systemically throughout the plant
- Active for 3 weeks
- A protective compound naturally occuring in plants



During stress conditions, cell metabolism

slows down, microfissures appear between

cells and water is lost from the cell.











#### APPLICATIONS

CROP	TARGET	DOSE	APPLICATION Timings	APPLICATION METHOD
Strawberry, raspberry and other berry crops (in open field and tunnels)	Preventing frost damage.	2–4 kg/ha	At flowering stage, 24 hours before low temperatures.	Spray plants evenly moist. Water amount: 400–1000 l/ha.
	Improving growth during unfavorable growth conditions.		24 hours before stress conditions.	
	Improving the shelf life and preventing cracking.		Start the treatment at the ripening stage and repeat every 2-3 weeks.	

- **Compatibility:** can be sprayed together with fungicides, insecticides and foliar fertilizers, except for formulations containing copper.
- Also compatible with the biological fungicides Prestop and Mycostop.
- The use of adjuvant/wetting agent in open field is recommended.
- The best conditions for spraying application are during windless and rainless weather, when the relative humidity is high.
- The maximum concentration of the spraying solution: 30 g/litre

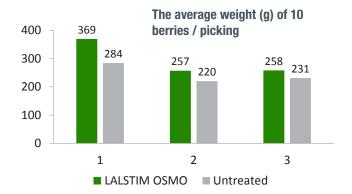
#### **CHARACTERISTICS**

- **COMPOSITION:** purified and crystallized glycine betaine from plant origin (97 %)
- **FORMULATION:** wettable powder
- PACKAGING: 2 kg
- **STORAGE:** 24 months at room temperature, in an unopened package
- SUITABLE FOR ORGANIC AGRIGULTURE

### RESULTS

### Increasing the yield during varying environmental conditions

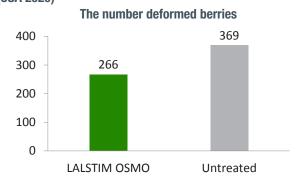
LALSTIM OSMO spraying repeated every 3 weeks increased the yield of strawberry crops (cv. 'Camarosa') exposed to varying environmental conditions.





### **Increasing the quality of berries during stress conditions**

LALSTIM OSMO spraying decreased the number of deformed berries, caused by high humidity and temperature, by 28 % (cv. 'Maverick'). The trial consisted of 80 test plants/treatment. (USA 2020)





Berry deformation caused by high humidity and high temperature.





