



opti**BOOST**[®] – towards a sustainable plant industry

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Game-changing Technology For A Sustainable world

Product family and applications



oliveCEPT®

Vegetable Oils, Olive Oil & Avocado



juiceCEPT®

Fruit / vegetable juices, cold brewed green tea, oat milk



wineCEPT®

Red and white wines



dryCEPT®

Vegetables, berries



OptiBoost® - for cut flowers

Roses, cut-flowers



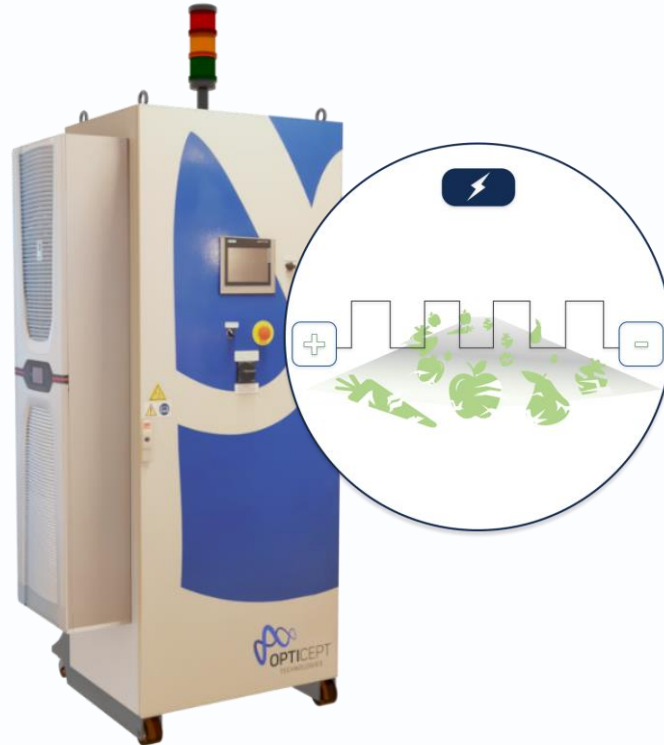
OptiBoost® - for cuttings

Cuttings, forest cuttings

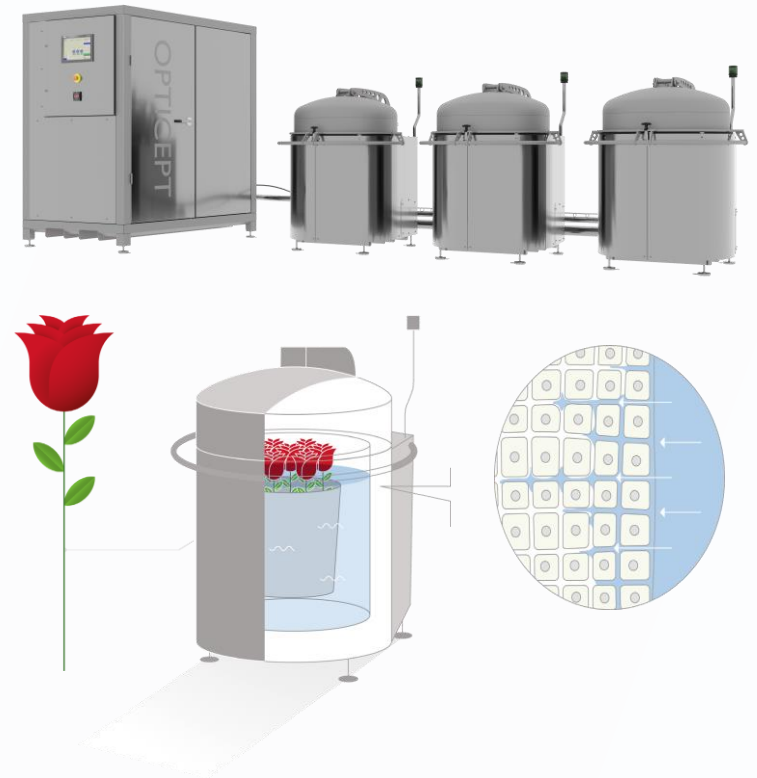
Our technologies



PEF (pulsed electric fields)



VI (vacuum Infusion)



Food applications

oliveCEPT®

- Improved quality - increase in polyphenols
- Processing temperature below 25°C
- Increased extraction, 5-15%
- Process efficiency (reduction of malaxation time by 50%)
- Less waste



juiceCEPT®

- Extended shelf life
- Increased extraction
- Improved quality (taste, color and aroma)
- Better nutritional values



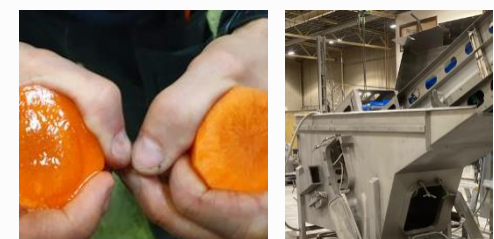
wineCEPT®

- Improved quality - higher levels of polyphenols, phenolic acids, tannins, etc.
- Maceration halved with improved results



dryCEPT®

- Shortened drying time
- Retains taste, aroma and color better
- Industrial evaluation is underway with Steinicke in Germany for drying carrots



Why?

For A Sustainable World



Why?

Cut flowers industry

- 30 – 50 billion cut flowers are produced annually
- 10 -20 % waste
- Roses that you can buy in the Swedish supermarkets came
 - by plane from Kenya or Ethiopia
 - by truck, in buckets with water from distribution centre



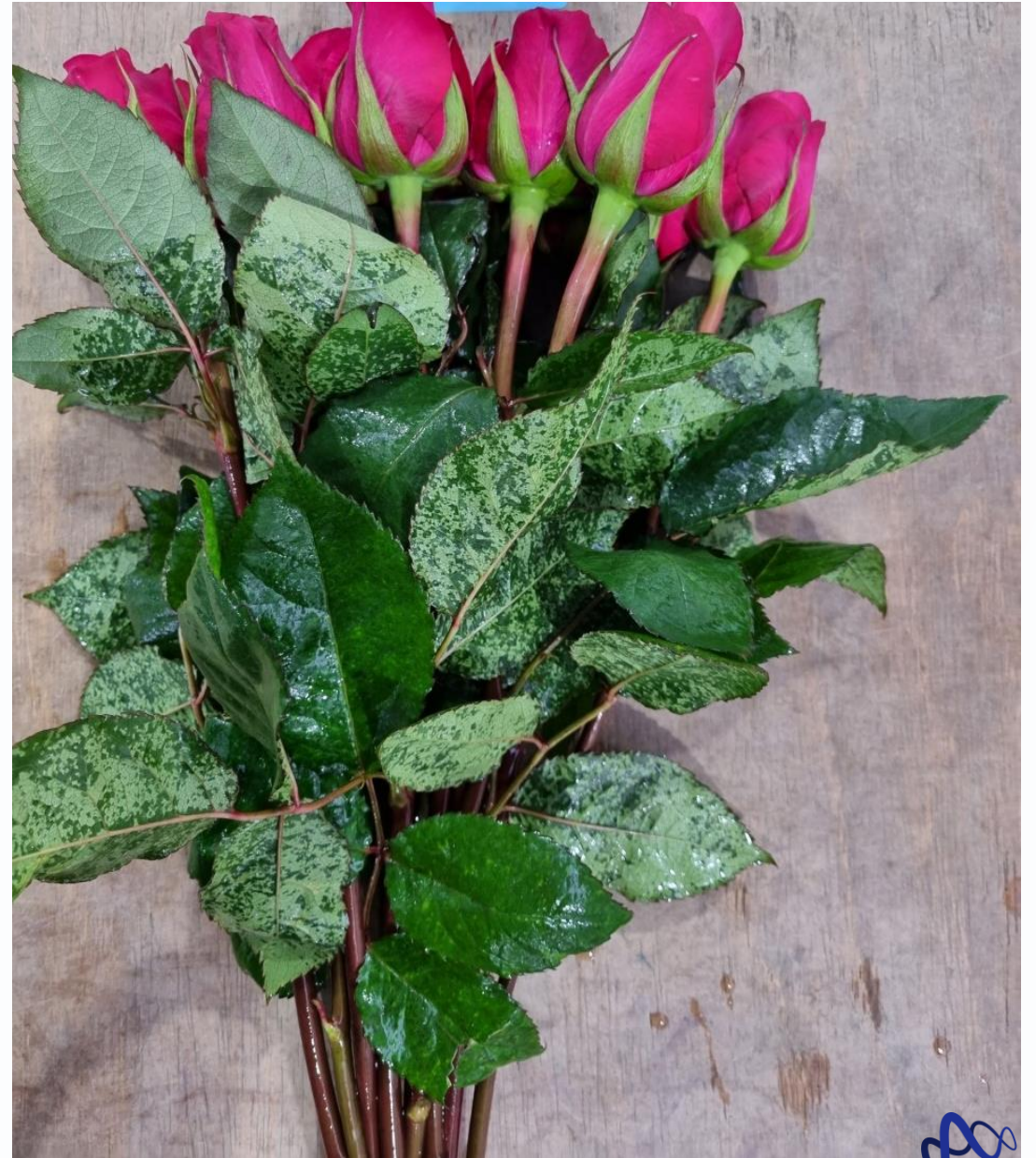
Our technologies



VI (vacuum Infusion)



- By controlled pressure change the air fraction can be evacuated from the air spaces
- Instead liquid is introduced into the tissue

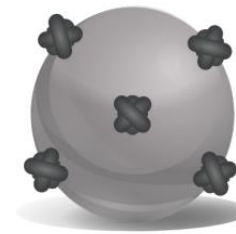




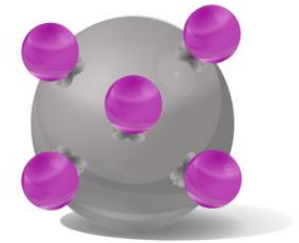
- Liquid is designed in collaboration with Prebona
- It contains silica particles and nutrients
- Silica is a carrier molecule with attached nutrients molecules
- Slow and long-lasting release of nutrients in the plant tissue



Silica Particle

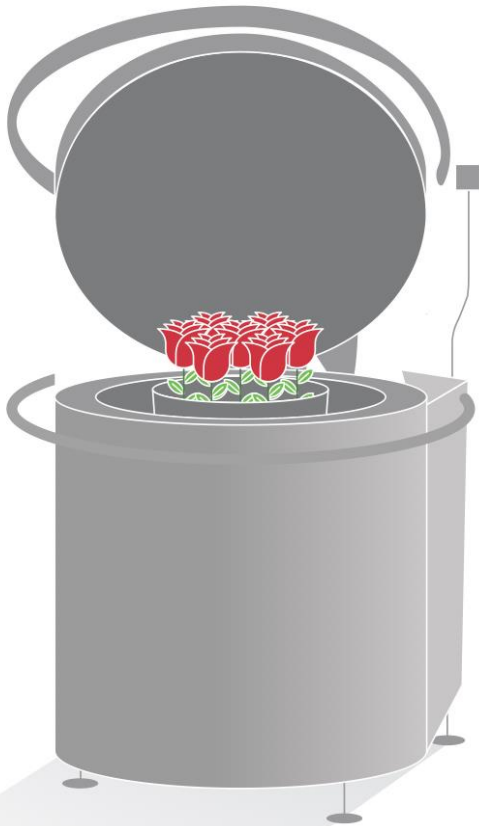


Silica Particle with
coupling agent

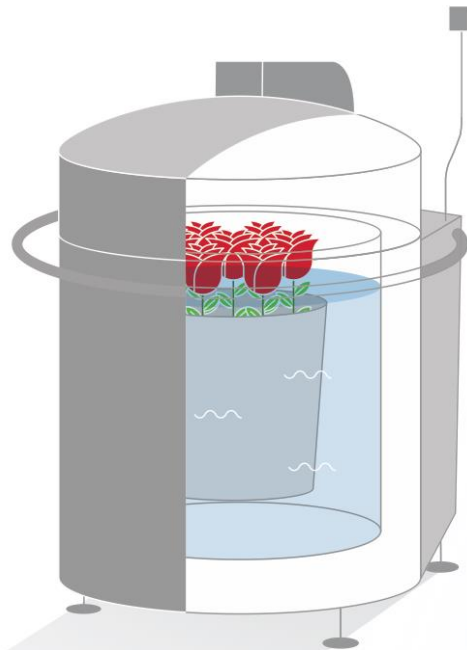


Silica Particle with
active atoms

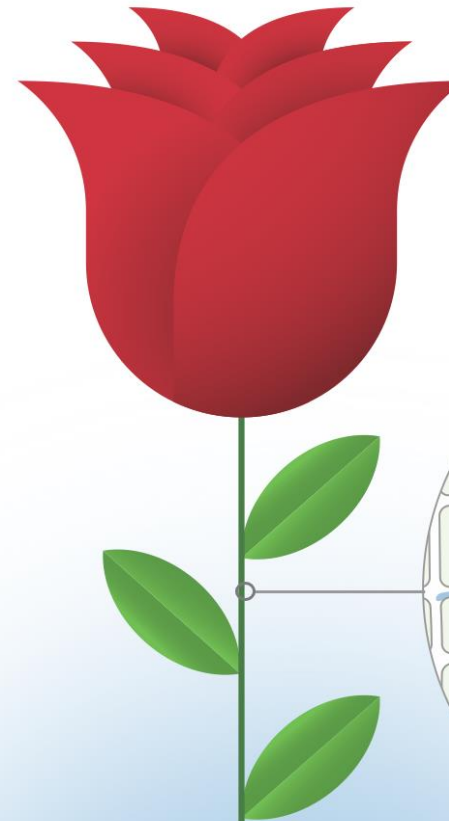




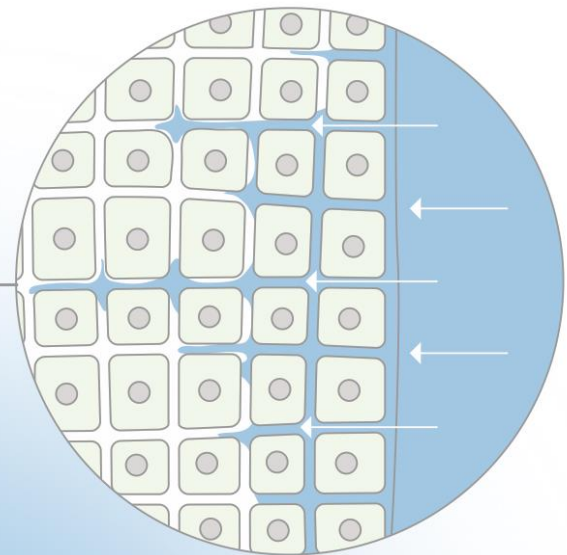
- Cut flowers are placed inside the treatment chamber



- Exposed to vacuum, drawing all the air out of the flower.



- Impregnated with the nutrient solution, petals are protected from the solution



- We reach the plant cells



- Longer vasselife of the flowers
- Better opening rate
- Enhanced coloring of the petals and greener leaves



The biggest supermarket supplier in the Swedish market – Target to treat all flowers with Optiboost

Commercial agreement to enhance the cut flowers of Dagabs clients

A blind test with roses started together to get commercial data. Treatment at wholesaler APH, Malmö. 40 cm roses, 9-pack

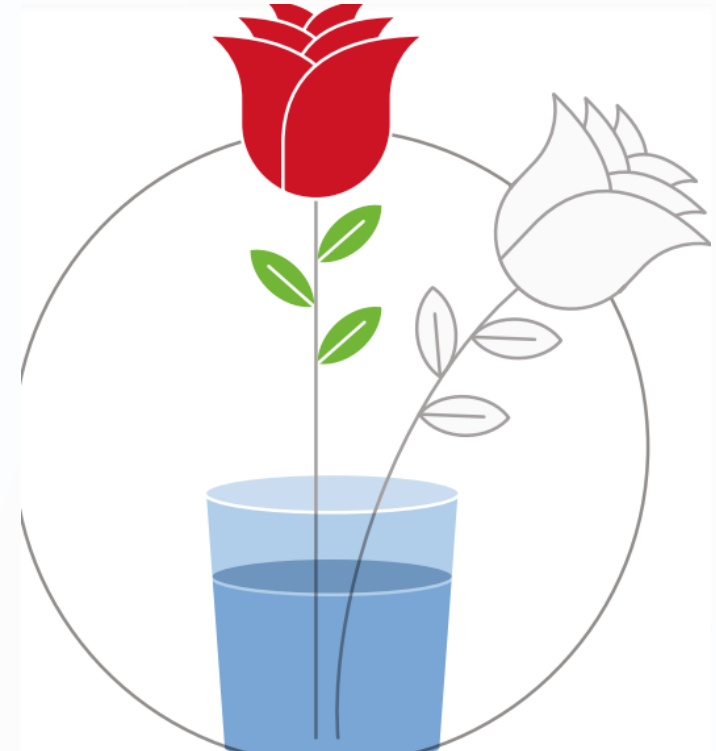
- 16-week commercial evaluation
- 100 supermarkets sold OptiBoost treated roses
- 100 supermarkets as a control group

- **36% increased sales in volume**
- **50% reduced wastage**



Benefits for the industry

- Less waste for the retail
- Higher quality of flowers – customers are willing to pay more
- Extended warehousing, more flexible handling for wholesalers
- Possibility to change the transportation: sea freight and dry truck transport



Thank you!

