



# Parka<sup>®</sup> Cuticle Supplement

POWERED BY **SureSeal™**  
BIOFILM TECHNOLOGY

## The First Line of Defense: The Cuticle

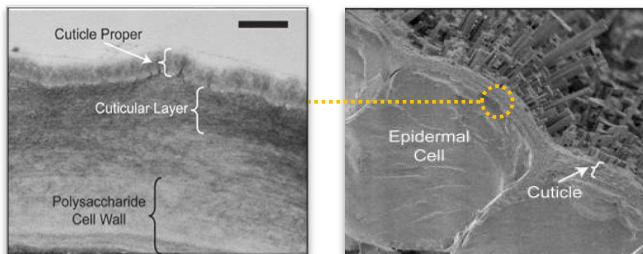
The cuticle is a plant's first line of defense between the environment and the epidermal cells. It protects against environmental and physiological stress early in development through cell elongation when fruits and vegetables are expanding rapidly in size. Lack of an adequate cuticle can negatively impact fruit quality and increase the potential of physiological disorders, such as sunburn and cracking.

## What is the cuticle?

- Protective film covering the surface of leaves, young shoots & fruit
- Composed of lipids and polysaccharides impregnated with wax
- Wax, resin and salts can deposit on the surface as crystals
- Synthesized exclusively by the epidermal cells
- Inert, continuous layer and resistant to oxidation

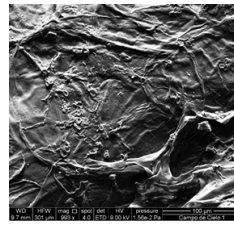
## What is the role of the cuticle?

- First line of defense between the environment and the epidermal cells
- Regulates water loss and uptake
- Acts as a barrier, restricting pathogen infection
- Protects against UV radiation
- Provides mechanical support

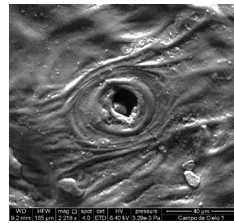


## What is Parka?

The components of Parka are very similar to the already existing cuticle. Parka is a phospholipid and polysaccharide based product designed to supplement the naturally occurring cutin and waxy-layers of the plant's cuticle. Its unique traits provide cracking protection, reduction in doubles as well as fruit quality enhancement.



Parka coated fruit cuticle



Parka coated leaf cuticle with open stomata

### ELASTIC

Coating flexes & expands with plant & fruit growth.



### HYDROPHOBIC

Repels water.



### PERMEABLE

Allows continued transpiration and gas exchange. Not an antitranspirant.



### EDIBLE

Made up of food grade ingredients



### CLEAR

Leaves no residue



### COMPATIBLE

High tank mixing capability  
No surfactant needed



### Parka - Use Recommendation

Use 1 gal of Parka in 100 - 200 gal of water per acre to obtain a 0.5 - 1.0% V/V final solution.

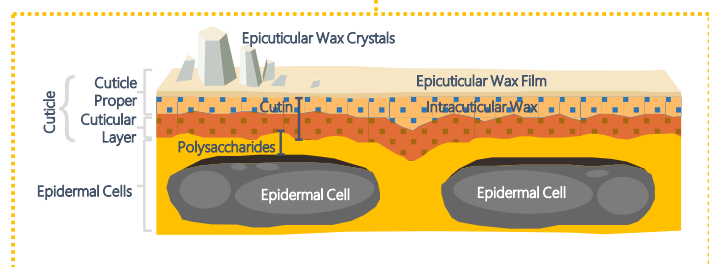
Best results are obtained with a preventative program  
Rain cracking and fruit quality: 2-3 applications:

- 1) Apply at fruit set
- 2) Apply at straw color
- 3) Apply prior to rain (at least 10 days after the 2nd app)

Reduction of Doubles/spurs 1-2 applications:

- 1) Apply 1-2 weeks post harvest
- 2) Apply 21-30 days later

Do not mix with surfactants, pinolene-based products, Captan or any other products that are not compatible with oil based materials.





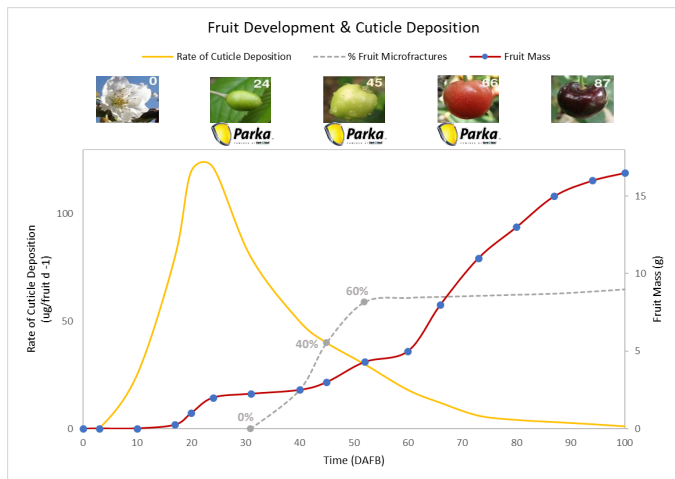
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## Get the most from Parka by applying early

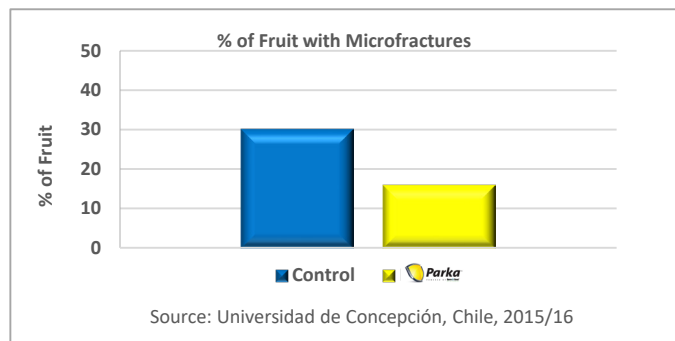
The cuticle is a plant's first line of defense between the environment and the epidermal cells. Lack of an adequate cuticle can negatively impact fruit quality and yields.

The natural deposition of the cuticle occurs during the early stages of fruit development. As the cherry expands during cell elongation, cuticle deposition significantly decreases. Microfractures occur as a result of this phenomenon with 60% of the crop containing microfractures by straw.



## Impact of Microfractures

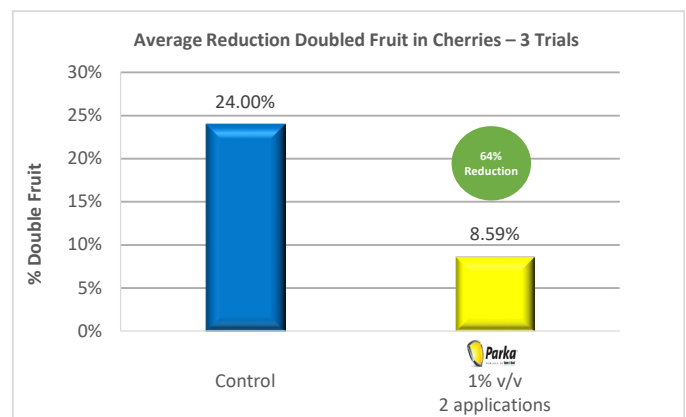
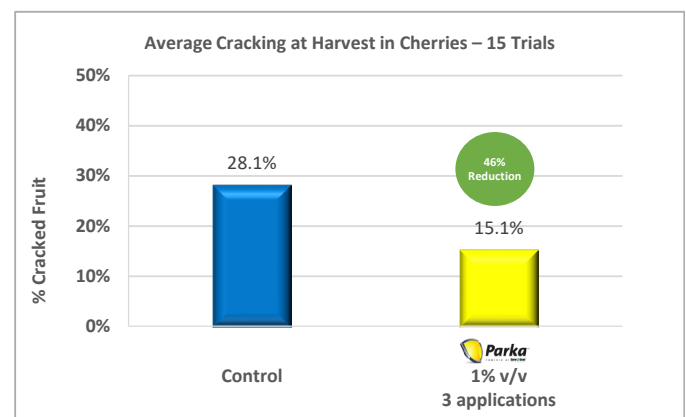
- Impair the barrier function of the cuticle allowing for uncontrolled transport and loss of water from the surface
- Create a stress point in the epidermal cells which leads to cracking
- Weaken the physical barrier and provides an entry point for opportunistic pathogens
- Decrease the potential for storage-ability
- 60% of the crop containing microfractures by straw.



## Cherry Cracking & Doubles/Spurs Trial Results

When compared to an UTC, Parka has proved to reduce cracking by an average of 46% or more year over year.

Post harvest applications of Parka have proven to have a positive impact on reducing doubles and spurs by 64%.



**For more information on Parka, contact your Cultiva Representative:**

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