

always  
inspiring more...

symrise 

**inspiring citrus™**

*Authentic citrus through creativity  
and science*

White paper | 2024

## Citrus remains an important taste tonality and is indispensable from consumer's lives

Citrus is a **unique and timeless flavor tonality**, used in a variety of products across the food and beverage industry that we all know and love.

It is associated with **refreshment, vitality and energizing qualities** – making it a taste favorite among consumers. Packed with vitamin C, citrus fruits boost the immune system, promote healthy skin, elevate mood, and provide antioxidants that help combat diseases.

Our global platform inspiring citrus™ helps you to create consumer-preferred products with **authentic citrus taste**, ranging from natural extracts to authentic countertypes.



## The citrus availability challenge

The global availability of high-quality raw material is declining, which poses ongoing challenges for manufacturers and suppliers.

Citrus is under pressure from a number of angles, all converging to **reduce supply and increase prices**. This inevitably poses questions about how long-term supply can meet continuously increasing demand.

## CHALLENGES FOR MANUFACTURERS & SUPPLIERS

### DEVASTATING DISEASES



citrus greening (HLB), bacterial / fungal diseases

### CLIMATE INSTABILITY



hurricanes, cyclones, droughts, freezes

### BIGGEST COMPETITION



fresh fruit market

### MORE NFC (not from concentrate)



less juice concentrated, less aroma and essence ingredients

### CHANGES OF LAND USE



shift to competing cash crops; less trees re-planted

## inspiring citrus™ – our promise

Our global platform inspiring citrus™ comprises all **varieties of citrus solutions** – from natural extracts to authentic countertypes!

We are mastering citrus to **create unique taste experiences, while at the same time positively impacting both people and the planet.** Our team of citrus experts exchange their knowledge around the globe and work together with a trusted partner network across major citrus sourcing regions.



### GUARANTEED SUPPLY

Securing continuous availability of high-quality citrus raw materials and natural alternatives



### WINNING TASTE

Decoding consumer & market trends and translating them into consumer-preferred citrus taste



### TAILORED SENSORY EXPERIENCES

Co-creating stable flavor solutions and unique sensory experiences for a variety of applications



### VALUE FOR MONEY

Offering and securing attractive pricing for our customers today and tomorrow



## Delivering a broad portfolio of citrus solutions

Citrus can be found in many different product and application types. To create consumer-preferred citrus taste, it is crucial to **understand this raw material down to a molecular level** and tailor it to the specific application and consumer needs.

Based on our sensory and consumer understanding, we can deliver technology driven authenticity while at the same time delivering against local & global regulations. Symrise is using proprietary tools, such as **Flavors for Feelings™**, to better understand desired taste profiles.

To ensure consistent language and distinctive description of citrus profiles around the globe, we have developed a **dedicated Symscript™ language** that is used by our expert teams.



## Longstanding expertise in research and technology

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In addition to driving data science on senso-analytical decoding of citrus oils and formula prediction, we are working on process technology to compile impactful flavoring preparations.

All of the findings and know-how is circulated within our **global citrus expertise team of senior flavorists**, to ensure lift and shift of new technology solutions.

Along with continuously building our expertise internally, we also work together with external partners, for instance in academia, within an ecosystem approach. This **integrated value chain** enables us to improve citrus oil processing and drive scientific research on citrus varieties..



To **create a unique fingerprint and deliver richness and authentic taste**, we have launched our proprietary SET Flavors™.

**SET Flavors™** (Selective Enrichment Technologies) combines efficient processes and advanced technologies that enable Symrise to **capture nature's complexity, creating both signature and authentic taste profiles**.

By using a combination of different physical separation technologies, we can modify the composition of valuable molecules in citrus essential oils – to deliver unique profiles.

inspiring citrus™

Contact us to create authentic citrus taste experiences!

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