

The background of the entire page is a top-down view of various citrus fruit slices, including oranges, lemons, limes, and grapefruits, scattered across a light-colored surface. A large, semi-transparent green shape is overlaid on the right side of the page, containing the main text.

# Unfolding Citrus

Expert Insights for Transforming  
Critics into Connoisseurs

CASE STUDY



**7,400**  
citrus beverage consumers  
surveyed around the globe



## Citrus Motivations Under the Microscope

ADM recently surveyed citrus beverage consumers worldwide to better understand their psychology and inherent value systems. Based upon our findings, we were able to create stable consumer segmentations to recognize need states and motivations beyond that of just classic preference percentages.

This in-depth research extends further than flavor types; it addresses executing specific descriptive sensory cues in citrus to deliver on the needs of modern consumers.



# A Look into Citrus Non-Enthusiasts

In our research, we found a significant amount of consumers in key citrus markets like the US who strongly agree with the statement:

**“Citrus flavored drinks are ordinary and boring and never my first choice.”**



### RESIDUAL Reimagine the Classics



LEMON



LIME



ORANGE

### DOMINANT/EMERGENT Consumption and Awareness



TAHITIAN LIME



MEYER LEMON



BITTER ORANGE



TANGELO

### EMERGENT/DIFFERENT New and Curious



SICILIAN LEMON



CALAMANSI




YUZU


## The Challenge

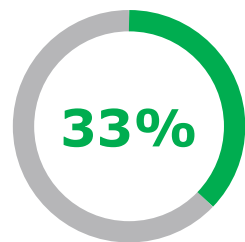
With such a large contingent of key consumers unenthusiastic about citrus – how do you transform these citrus critics into connoisseurs?

**Let’s take a closer look.** Citrus non-enthusiasts in the US index lower on Lemon and Ruby Red Grapefruit consumption than other citrus beverage consumers, while ranking higher for varieties like Tahitian Lime, Meyer Lemon, and Bitter Orange.

### Key motivations which can guide citrus flavor and citrus product development:

 Deliver excitement through stimulation, discovery, the uncommon, and the less conventional (or mainstream)

 Take advantage of their openness to try less common citrus flavor varieties



The **“Citrus Non-Enthusiast”** consumer makes up one third of all citrus beverage consumers in the US.

UNITED STATES

## The Solution

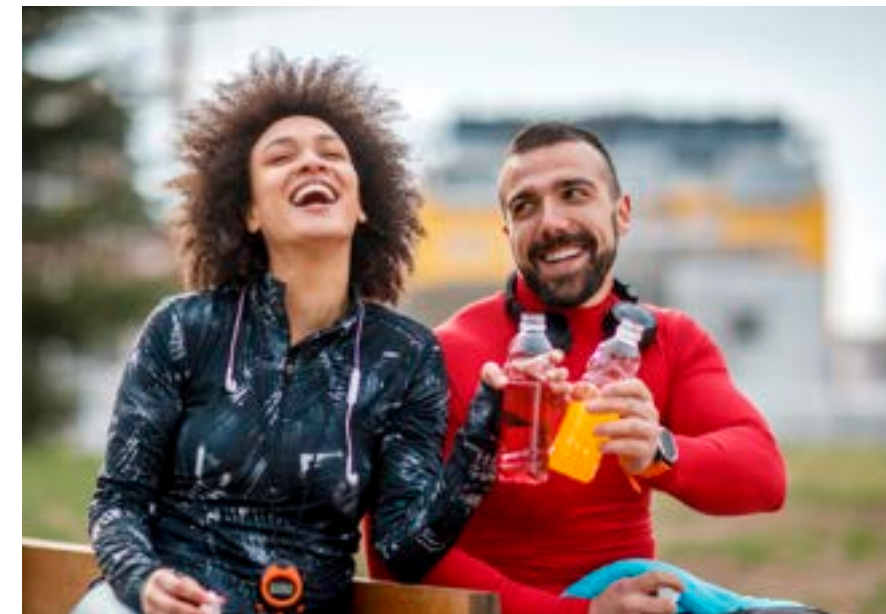
# Bold and Vibrant: Corefold™ Technology

With the ability to craft our own captive raw materials for differentiated citrus profiles, our experts have engineered Corefold™ citrus flavor technology to deliver on the promise of bold and vibrant citrus flavors that unlock opportunities with Citrus Non-Enthusiasts in the US.

Corefold™ citrus oil technology is created through a novel approach to distillation in which ADM concentrates the core part of the citrus oil through a proprietary process. Through this technology, we are able to amplify molecules responsible for impact and mouthfeel all while capturing top notes for freshness and high aroma, which are usually lost in standard extraction methods.



**We can then create a citrus product perfectly suited for even the most indifferent end users.**

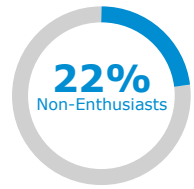


# Enticing Consumers with Varietal Appeal

Launching citrus flavors into different countries in the EU does not have a one-size-fits-all solution. ADM uncovered the nuances between country-specific citrus narratives based on the awareness, curiosity, and interest in consumption of varietal citrus flavors.



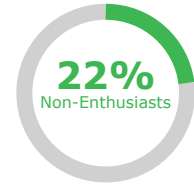
**UK**  
Flavors need to be exciting but with recognizable elements. Lime and Blood Orange both have high awareness, high interest but only moderate consumption from this group of consumers.



**France**  
Opportunity exists to create more sophisticated, exciting and stimulating citrus through more refreshing notes in tonalities such as Lime and Clementine.



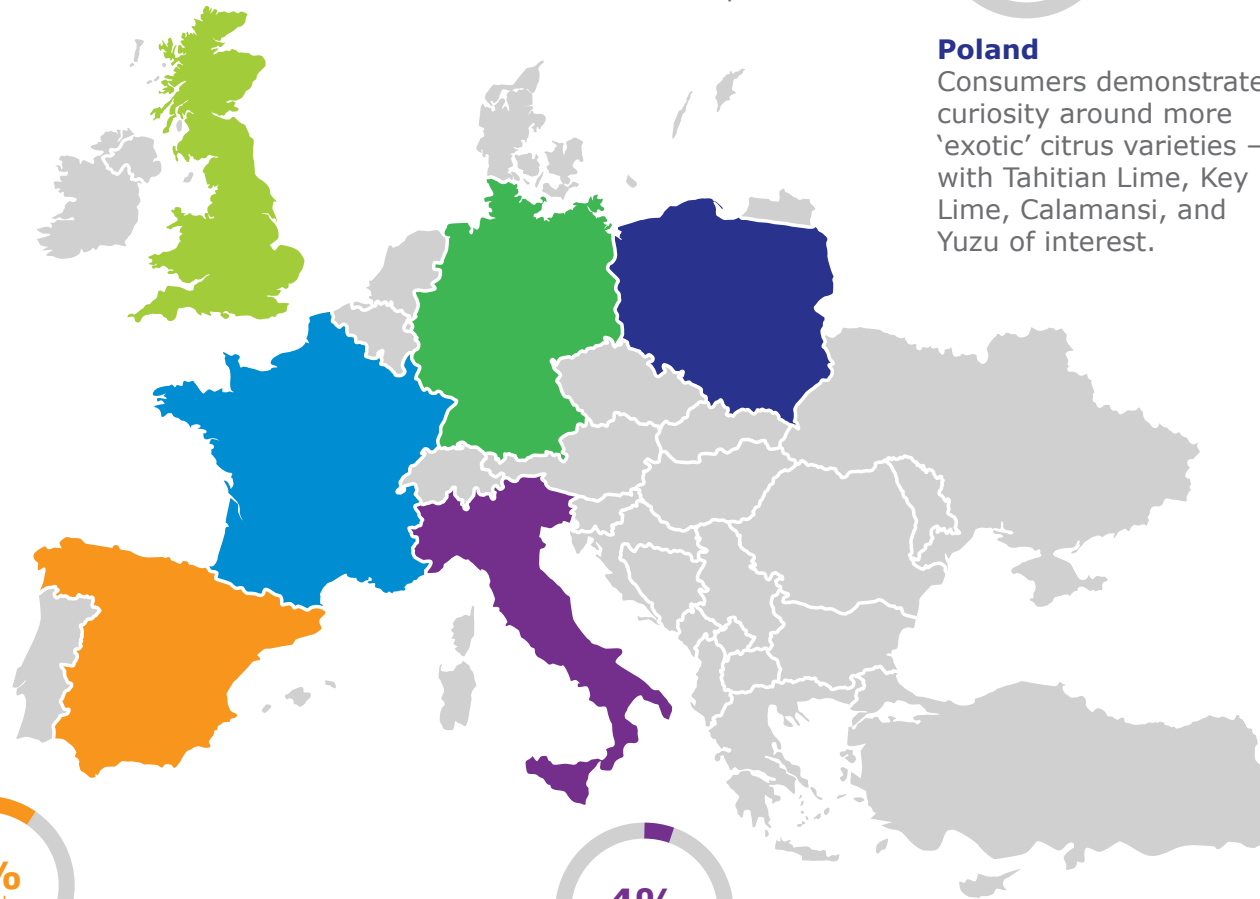
**Spain**  
Spanish (like Italian consumers) are interested and aware of citrus – profiles such as Pink Grapefruit, Mandarin, and Blood Orange offer areas of opportunity.



**Germany**  
Citrus Non-enthusiasts here would benefit from flavor profiles such as Blood Orange, Mandarin and Pink Grapefruit.



**Poland**  
Consumers demonstrate curiosity around more 'exotic' citrus varieties – with Tahitian Lime, Key Lime, Calamansi, and Yuzu of interest.





**Italy**  
Italians are very "citrus aware" but have opportunities to experience emerging profiles such as Key Lime and Yuzu.

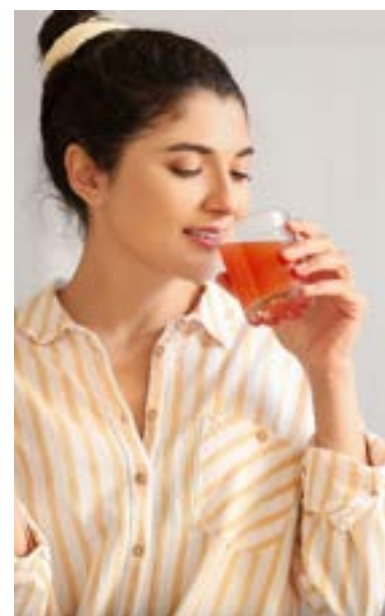


## The Challenge

While France, Germany, and the UK have similar Non-Enthusiasts represented within their populations, Spanish, Italian, and Polish consumers have high citrus awareness and engagement. Non-enthusiasts look for different, less 'familiar' citrus experiences, while other consumers who embrace citrus look to satisfy their curiosity for new taste sensations.

### For EU consumers, key motivations which can guide citrus flavor and citrus product development:

-  Emphasize the taste experience over functionality
-  Uncover and communicate about heritage flavors that connect to roots



**We offer the right citrus  
flavor profile for the  
right consumers.  
Always.**

## EUROPE

### The Solution

With each country having its own unique motivations, having a citrus toolbox for customization and localization is key.

### New and Emerging: Varietal Citrus Flavors

Depending on the regional consumer value system, varietal citrus can provide an answer to localized consumer needs. Whether it's the exploration and stimulation of new experiences or the way the flavor reflects their idealized identity, ADM's Varietal Citrus Toolbox offers consumers in the EU an assortment of flavor profiles for every need and occasion.

With a collaborative global team of citrus flavorists, the ability and expertise to customize and localize profiles to each country's specific flavor preferences, and vast knowledge of local regulations, ADM offers a full-service partnership for launching your brand's next regionalized beverage innovation.

# Next-Level Citrus for APAC Consumers

A common challenge shared globally is creating citrus beverages that are attuned to the local taste and desires of diverse communities.

What is exciting and desirable in one country may be the opposite in another, leaving beverage manufacturers with the issue of creating targeted beverages for wide-ranging demographics. To add to this challenge is that fact that many APAC consumers find citrus altogether undesirable.

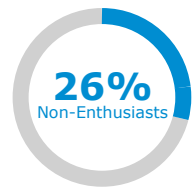
## The Challenge

According to ADM's proprietary research, 23% of Australians and 26% of Thai people are considered "Citrus Non-Enthusiasts" – those who identify with the statement that citrus beverages are ordinary and boring and not their first choices.

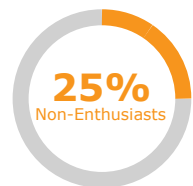
This is a pattern across many APAC countries, with only Filipinos showing a very low non-enthusiasm at 8%.



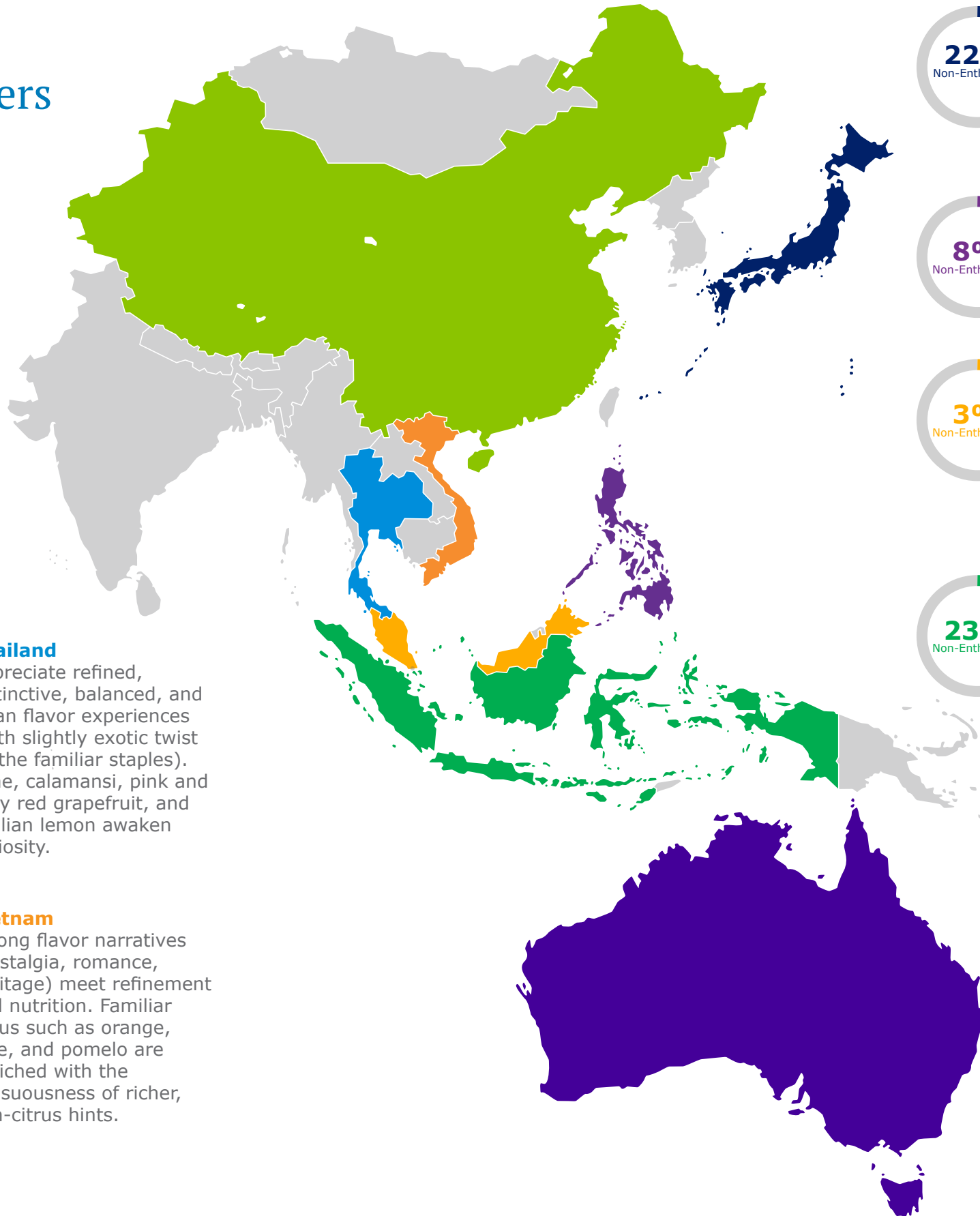
**China**  
Evolution of icons such as lemon and orange are of interest especially Meyer lemon, bitter orange, and blood orange. Seek powerful citrus flavor experiences that are uplifting, bold, wild, and somewhat exotic.



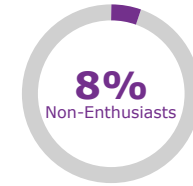
**Thailand**  
Appreciate refined, distinctive, balanced, and clean flavor experiences (with slightly exotic twist on the familiar staples). Lime, calamansi, pink and ruby red grapefruit, and Sicilian lemon awaken curiosity.



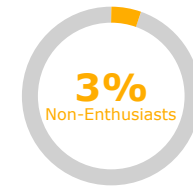
**Vietnam**  
Strong flavor narratives (nostalgia, romance, heritage) meet refinement and nutrition. Familiar citrus such as orange, lime, and pomelo are enriched with the sensuousness of richer, non-citrus hints.



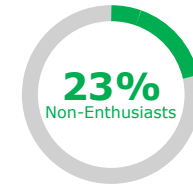
**Japan**  
Interested in citrus varieties with provenance (Sicilian lemon, Tahitian lime, Valencia orange). Red citrus varieties are also appealing, like pink grapefruit and blood orange.



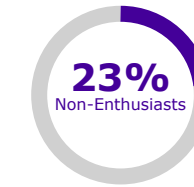
**Philippines**  
Citrus curious across the board. Red and provenance citrus varieties are highly appealing, along with yuzu, tangelo, and clementine.



**Malaysia**  
Citrus curious with relatively high interest in citrus, particularly pink grapefruit, ruby red grapefruit, and yuzu. Bitter orange is the least appealing proposition.



**Indonesia**  
Opportunity exists to create more sophisticated and crafted beverages using citrus flavors. Noble and refined flavor experiences are sought after with a strong interest in orange variations (blood, bitter), lime, and Meyer lemon.



**Australia**  
Seeking new (but not foreign) narratives around the more traditional citrus spaces and flavors. Orange is more interesting than lemon, and new manifestations such as bitter orange are particularly appealing.

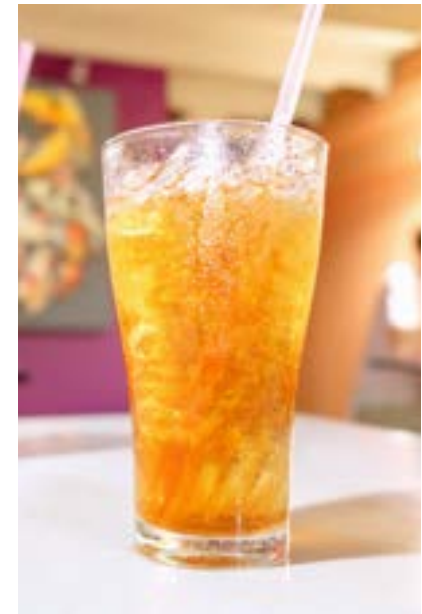
## The Solution

# Regionalized Citrus to Excite & Delight

To truly convert citrus agnostics into believers, beverage manufacturers first must develop a deep understanding of country-specific needs. Fortunately, ADM has done a deep dive into APAC citrus consumers and has put together key drivers for each country as well as potential ways to craft market-winning solutions. The analysis shows the deep-seated need for citrus flavors that are cultivated, rare, and unusual.

APAC consumers are tired of the traditional and are seeking beverages that are sophisticated in quality and profile. They want to be excited by what they are drinking with a consciousness of where the fruits and flavors originate. ADM's citrus flavor portfolio in APAC offers a comprehensive range of citrus flavor profiles that comply to the local requirements, all while delivering customized taste profiles.

**This end-to-end solution is the perfect fit to win over even the most unenthusiastic APAC consumers.**








## Why ADM?

We have the tools, technical know-how, and creativity to provide you with the unique citrus profiles your consumers crave. We understand citrus on the molecular level and have the broadest technological bandwidth on the market today. Our patented Corefold™ technology allows us to create bold, vibrant citrus flavors and our Varietal Citrus offerings can bring an element of surprise and discovery for unique profiles.

Whether you are looking for high-performing citrus profiles for your application, need product ideation and development support, or prefer full-service turnkey solutions, our experts have you covered.

### Leverage our knowledge:

 In key markets such as the US, Germany, France, UK, Spain, Italy, Poland, China, Japan, Malaysia, Philippines, Thailand, Indonesia, Vietnam, and Australia

 On shaping your citrus taste using our captive and proprietary technologies

## What do you need to know about Citrus consumers?

CONTACT US TO LEARN MORE.

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