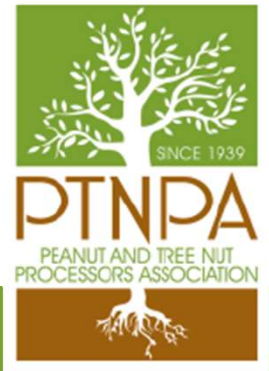




MACADAMIA COMMODITY WORKSHOP

Troy Johnson | Nutseller LLC

Hotel Del Coronado | January 15/16, 2023



TOPICS

Brief history of macadamia nuts

Understanding the macadamia nut

World Macadamia Organization

Supply statistics

Market forecast

New products

Overview

Questions



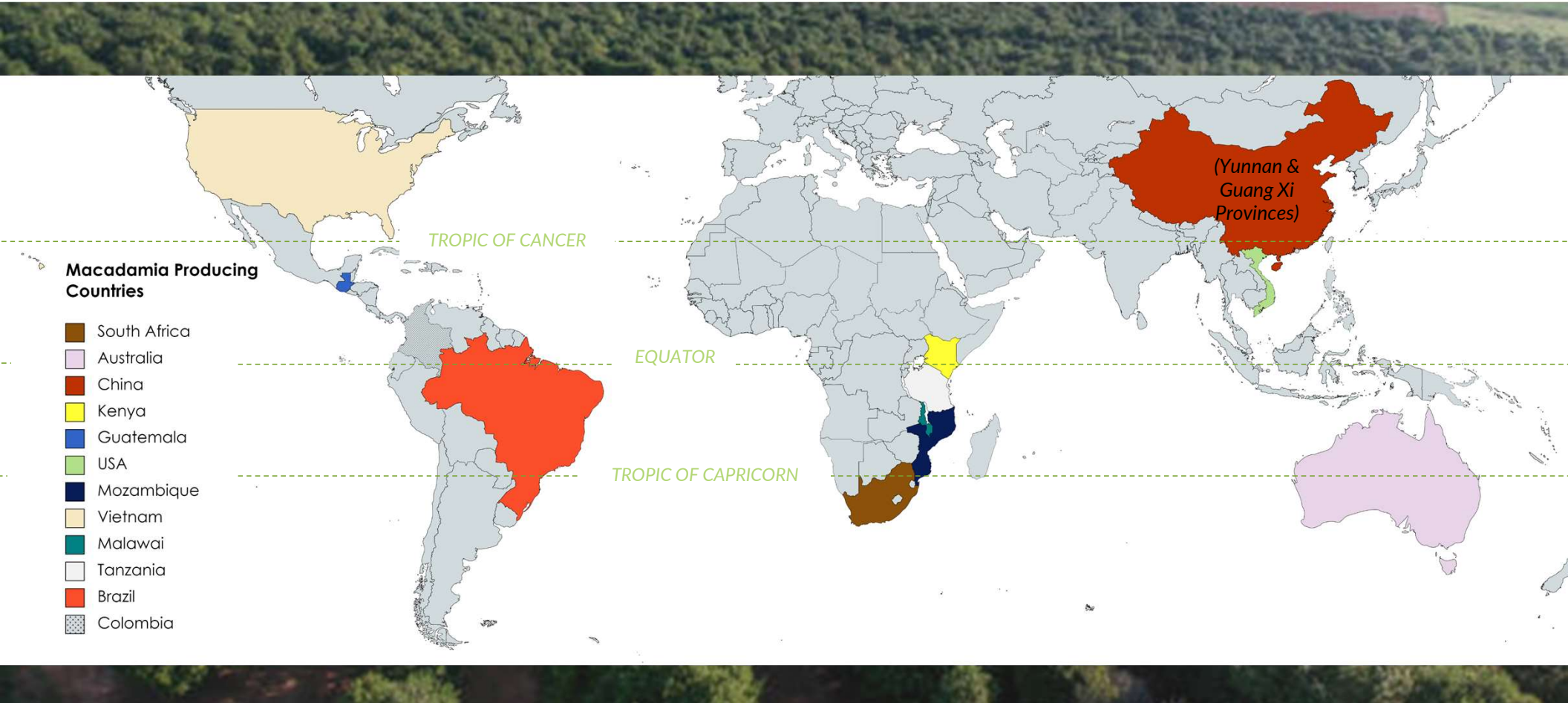
HISTORY OF THE MACADAMIA NUT



- Origin of the Macadamia
- Commercialization
- Organizations
 - Australian Macadamia Society (AMS)
 - Nuts For Life
 - Macadamias South Africa (SAMAC)
 - World Macadamia Organization (WMO)
- Macadamia production is **1%** of the global nut production



MACADAMIA GROWING AREAS



BREAKOUT OF THE MACADAMIA

■ Wholes ■ Halves ■ Pieces ■ Meal

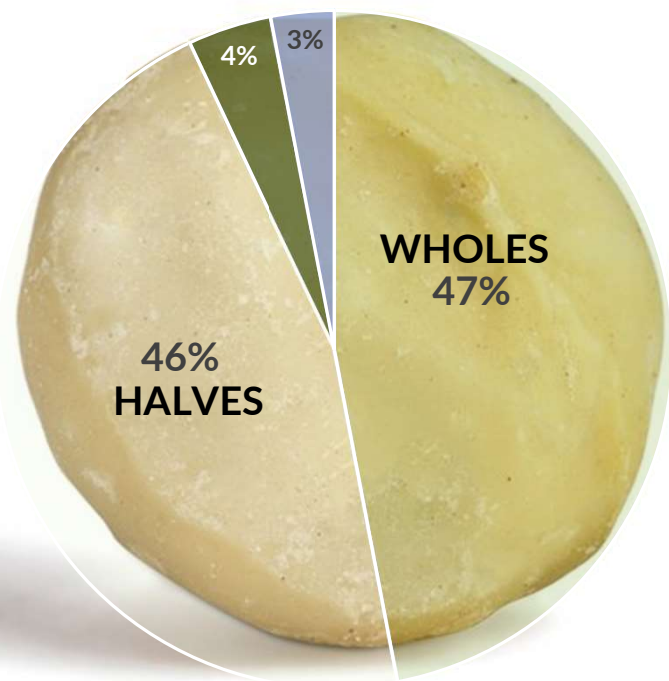


Table 1. Accepted definitions for labelling

Style 0	Min 95% whole kernel	>20 mm
Style 1	Min 90% whole kernel	16-20 mm
Style 1s	Min 90% whole kernel	13-18 mm
Style 2	Min 50% whole kernel	>13 mm
Style 3	Min 15% whole kernel	>13 mm
Style 4L	Min 80% halves	>13 mm
Style 4S	Min 50% halves and pieces	10-14 mm
Style 5	Pieces	8-12 mm
Style 6	Pieces	5-9 mm
Style 7	Pieces	3-6 mm
Style 8	Fines or Meal	<3 mm

Standard Sizing from World Macadamia Organization

WHY MACADAMIAS?

Macadamia nuts contain a variety of **good fats**, omegas-3, 6, 7 and 9 and have a favorable ratio that supports a healthy diet.

The vitamins/minerals, antioxidants and phytonutrients combined with good fats make them a “**superfood**”.

Inflammation is a significant health concern, and consumption of macadamias can help address issues such as; digestive, brain and heart health.

Predominant uses include:

- Snacking
- Energy bars
- Confectionary
- Baking
- Ice cream
- Foodservice
- Cosmetics

Newer uses include:

- Cooking oils
- Butters
- Non-dairy beverages
- Coffee creamers

AFRICAN MACADAMIAS

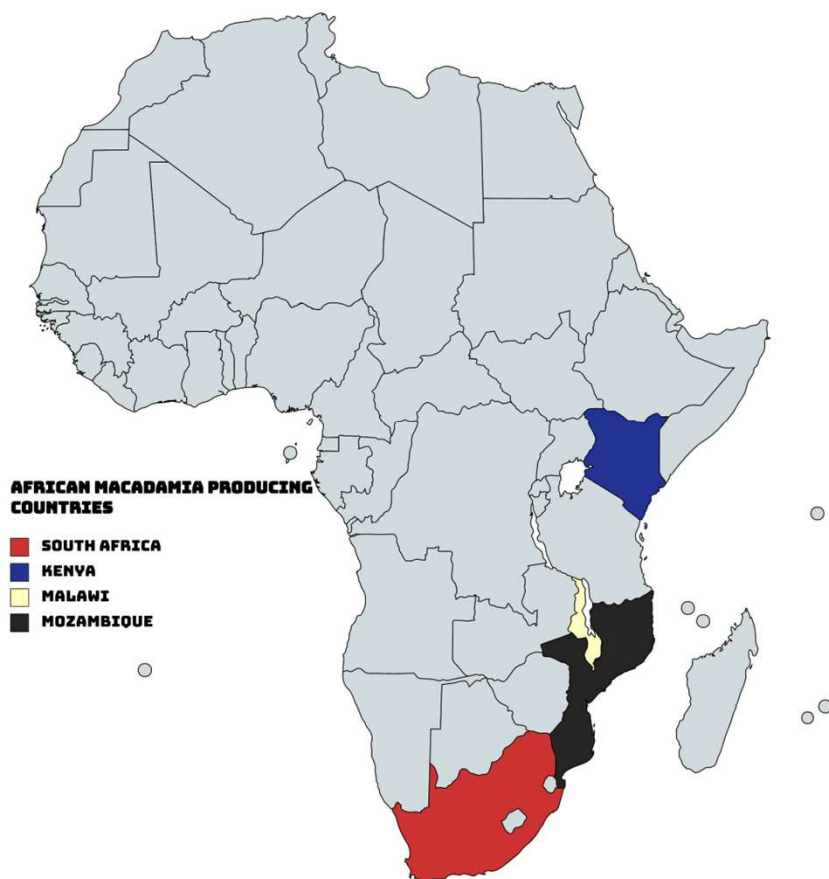
South Africa

- Has long challenged Australia as largest producing country for macadamias
- Estimated 72,652 established hectares, 60% producing
- Export 98% of their production
 - In 2021 – 57% were kernels and 43% inshell

Kenya

- Second largest producer of macs in Africa and fourth globally
- Not allowed to export inshell macadamias
- Growing in number of producers & marketers.
- Good source of organic kernels

Malawi and Mozambique are emerging producing countries. (Other neighboring countries as well)



AUSTRALIA'S MACADAMIA INDUSTRY IN NUMBERS



AUSTRALIA MACS

AUSTRALIAN MAJOR GROWING REGIONS

Macadamias are grown along the eastern coast of Australia from Nambucca Heads in the south to the Atherton Tablelands in the north. Collectively Bundaberg and the Northern Rivers region produce around 80% of the Australian crop.



PRODUCTION BY REGION DATA:

NORTHERN RIVERS	NAMBUCCA / YAMBA	SOUTH EAST QLD	CYMPIE	BUNDABERG	OLD TROPICAL
17,443	2,369	4,828	4,038	25,199	1,322
32%	4%	9%	7%	46%	2%

Table 1: Australian macadamia production by growing region for 2021 season. Tonnes in shell, 3.5% moisture content.
Source: Australian Macadamia Handlers Association



August – September
Flowering

October – January
Nuts form in clusters, shells harden, oil rapidly accumulates

February – August
Mature nuts fall to ground and machine harvested



CHINA MACADAMIAS

First trees were
planted in 1979.

Yunnan
Macadamia
Society
established in
2014 and have
150+ members

Estimated
266,666
hectares are
planted in
Yunnan &
Guangxi regions

Currently still a
net importer
with only 10% of
China's
consumption
coming from
local production.



WORLD MACADAMIA ORGANIZATION



Mission:

“The WMO is focused on promoting macadamias globally to help consumers connect with the benefits of including macadamias in their food choices, and to stimulate growth in existing and untapped markets.”

Focus Areas:

- India – Seeding the emerging India market
- China – Growing frequency of consumption
- Ingredients – Encourage food manufacturers to formulate products with macadamias (USA)
- Mindful consumption – Increase consumption with consumers who make healthy choices (Regional - California)

Enabling Activities:

- Create alignment of product standards
- Collated industry data and market research
- Health & wellness research
- Sustainability

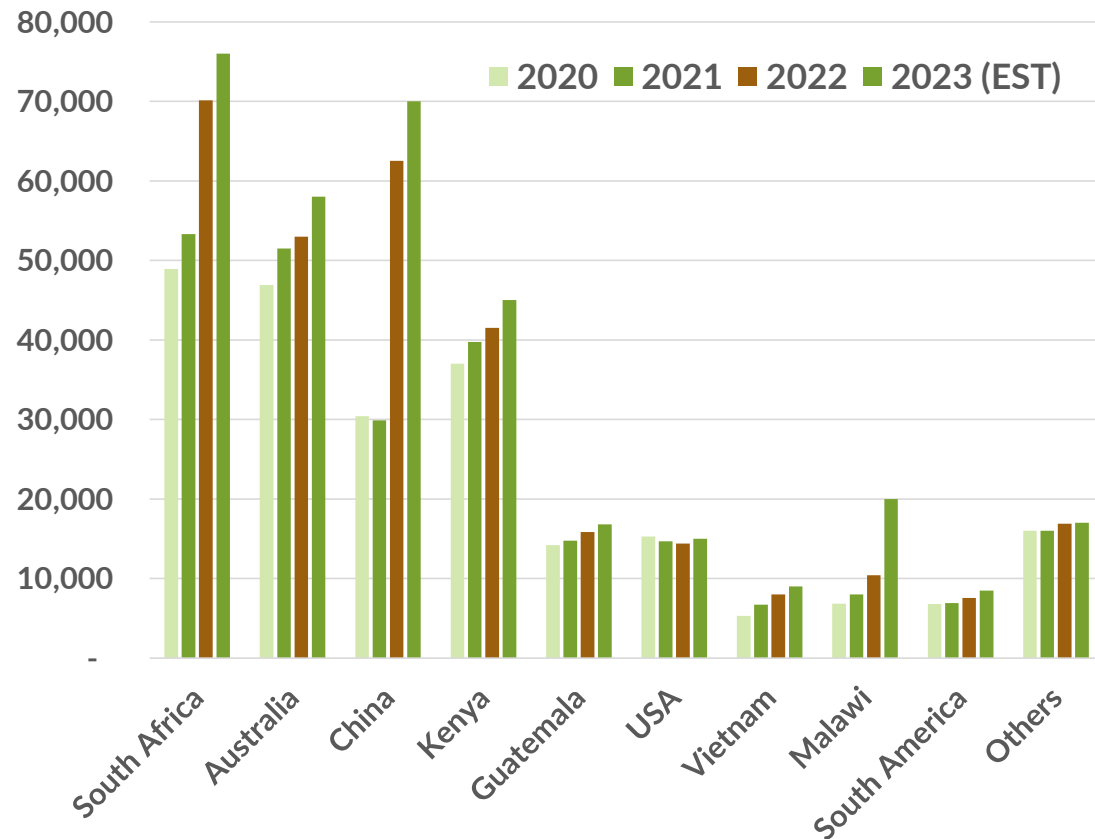


GLOBAL SUPPLY STATISTICS



Crop Size (Inshell Basis)				
	2020	2021	2022	2023 (EST)
South Africa	48,925	53,320	70,139	76,000
Australia	46,900	51,500	52,975	58,000
China	30,400	29,900	62,500	70,000
Kenya	37,000	39,750	41,500	45,000
Guatemala	14,200	14,750	15,850	16,800
USA	15,300	14,700	14,400	15,000
Vietnam	5,300	6,700	8,000	9,000
Malawi	6,850	8,000	10,400	20,000
South America	6,800	6,900	7,550	8,500
Others	16,000	16,000	16,900	17,000
World Total	227,675	241,520	300,214	335,300

Barring any serious weather events, we can continue to expect macadamia supplies to continue to grow in most all origins.

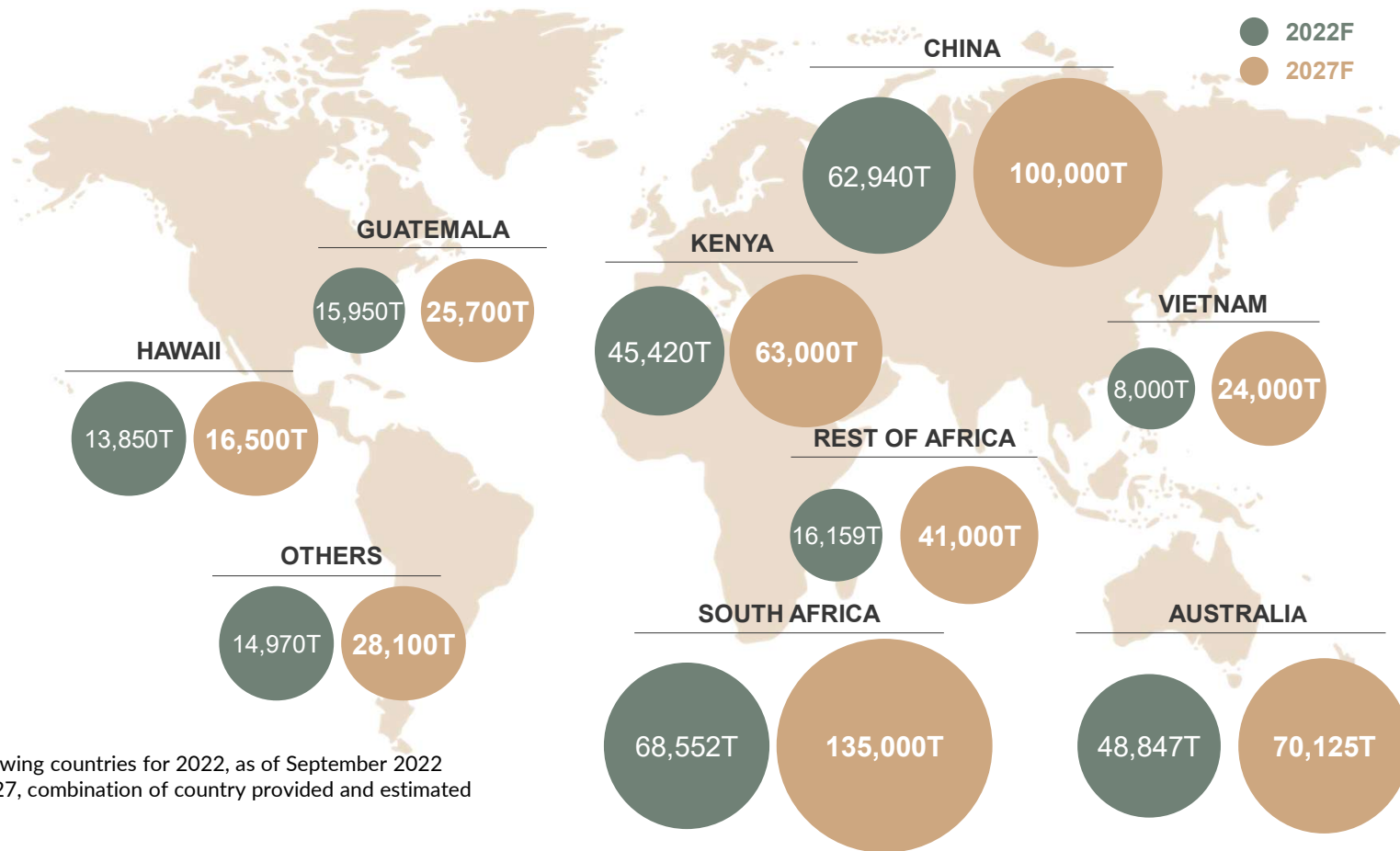
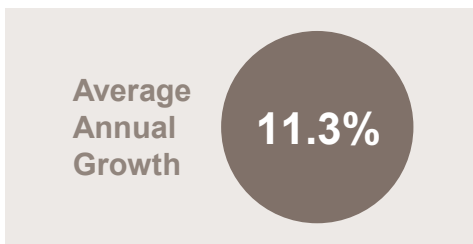


Statistics derived from various sources, including but not limited to: WMO, Australian Macadamia Society, INC. 2023 crop estimate established using trend analysis versus WMO 2027 expectations.

MACADAMIA SUPPLY FORECAST

SUPPLY: FORECAST TO 2027

WORLD	
2022F	2027F
294,688T	503,425T



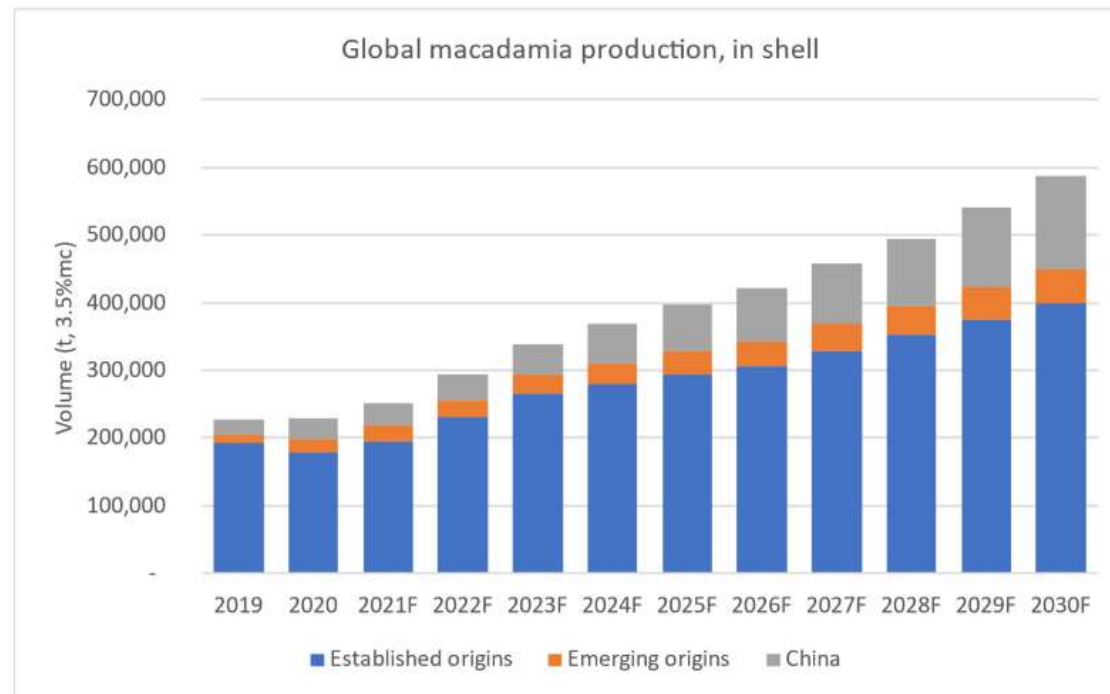
Source: WMO collated data received from growing countries for 2022, as of September 2022
WMO & SAMAC collated data for 2027, combination of country provided and estimated
Nut in shell @ 3.5% moisture

GLOBAL MACADAMIA FORECAST

China will out pace all other origins when it comes to new production, but all main origins are expected to grow.

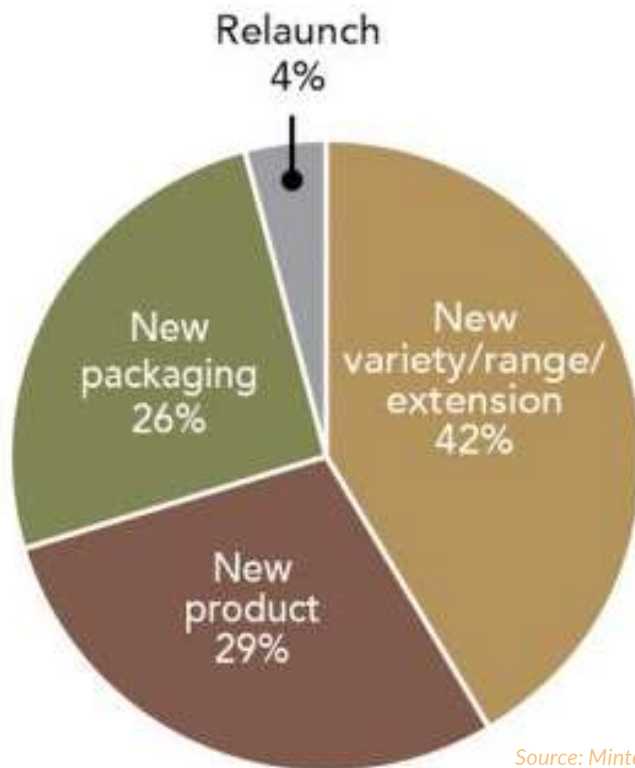


Global Macadamia Production Forecast

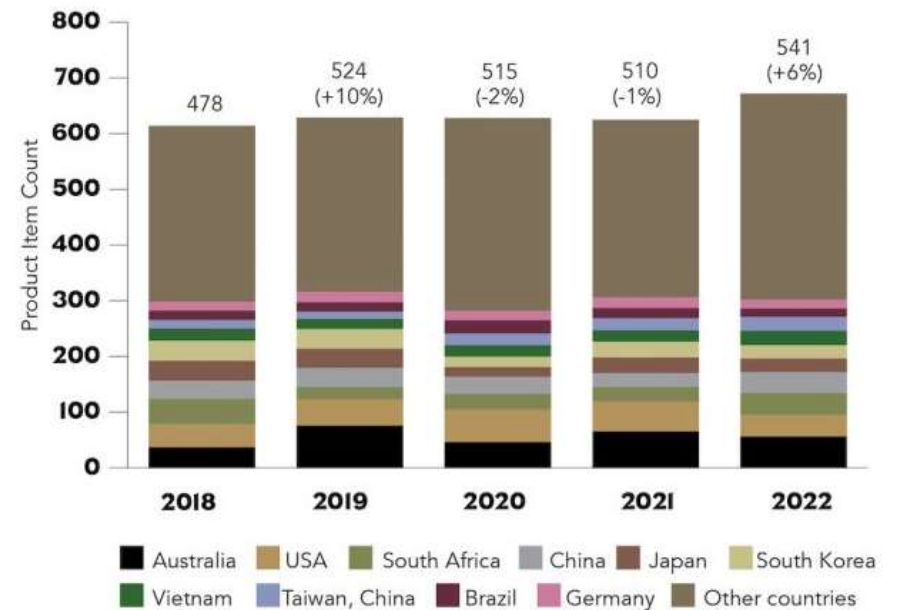


NEW PRODUCTS

New ingredient product launches by type



New ingredient products launched by market



Source: Mintel GNPD, October 2017 – September 2022

Information from Australian Macadamias December 2022 market report

NEW PRODUCTS

- Häagen Dazs 'Green Craft' Macadamia Soybean Ice Cream (Japan)
 - *Dessert / Non-dairy / Plant based / Indulgent*
- McDonalds White King macadamia pie (Japan)
 - *Fast food / Dessert / Indulgent*
- Uncle Tobys Goodness Bowl Indulgent Flakes Salted Caramel and Macadamia (Australia)
 - *Ready-to-eat / Breakfast / Healthy*
- Kikkoman Coffee and Cocoa Macadamia Milk
 - *Beverage / Coffee based / Indulgent*
- Milkadamia Milk Tea (USA)
 - *Plant based beverage / Indulgent*
- I'm Good Meal Red Bean Drink (South Korea)
 - *Plant based beverage / Single serve / On-the-go*
- Veyo Plant-Based Drinking Yoghurt (Vietnam)
 - *Lactose free / On-the-go / Plant based yogurt*
- Rainbow Nuthing Flavoured Crispy Macadamias (China)
 - *Snacks*
- Patrons Turmeric Macadamias with Coconut in Milk Chocolate (Australia)
 - *Snacks / Confection*
- Lotte Macadamia Truffles with Amaou Strawberries (Japan)
 - *Snacks / Confection*



OVERVIEW

Macadamias hold a high position in consumers minds that often equates with indulgence and high perceived value.

New products and new industries need to continue.

Macadamia production is expected to increase substantially in the next decade.

Consumption in China and India will likely need to consume most of this increased production.



QUESTIONS?

