

New Standard for “Certain Small Fruits” of the United Nations Economic Commission for Europe - UNECE

Peruvian ground-cherry (*Physalis peruviana*), Jaboticaba, Camu-camu, Brazil cherry, Surinam cherry, Barbados cherry (Acerola or West Indian cherry), Strawberry guava (Gooseberry guava), Marula, Jelly palm, Craboo (Nance), Spanish plum and Umbu (Imbu).

André Luiz Oliveira - Brazil

[International Meeting on Quality Control of Fruit and Vegetables - 2023 \(Bonn - Germany\).](#)

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AGRICULTURA
E PECUÁRIA

GOVERNO FEDERAL
BRASIL
UNIÃO E RECONSTRUÇÃO

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Ministry of Agriculture and Ministry of
Environment Normative on Bioeconomy

Ceagesp

Embrapa

Umbu producers

Jaboticaba exporters

Other interested parties (NGOs, Universities, FAO,
GTZ etc)

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Brazil

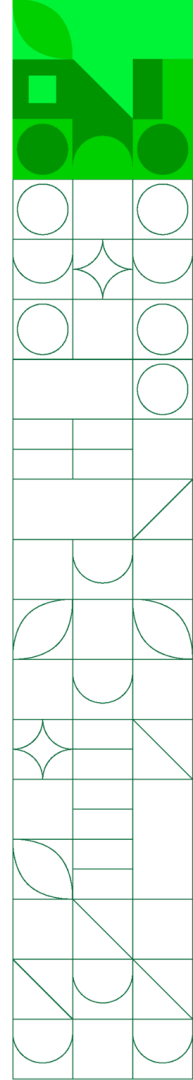


Source : SISBBR

- The largest country in tropical climate - 850 million hectares
- It is the 5th largest country in territorial extension, behind only Russia, Canada, China and the United States.
- 12% freshwater in the world
- Among the 250,000 tallest plants species, about 60,000 are native to Brazil
- 200 milion hectares of "cerrado"



Sourced from the presentation "**MAINSTREAMING BIOECONOMY TO LEVERAGE SUSTAINABLE DEVELOPMENT**" from **Fernando Camargo - Secretary of Innovation, Rural Development and Irrigation/MAPA - 2021.**



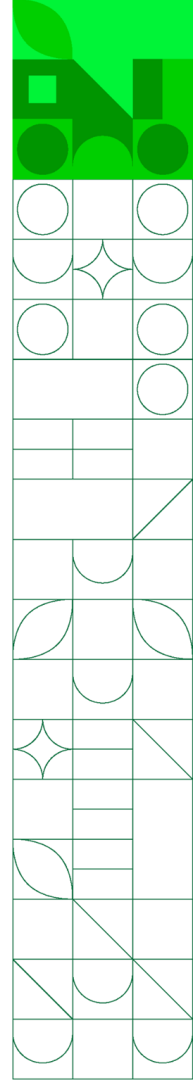
Brazil



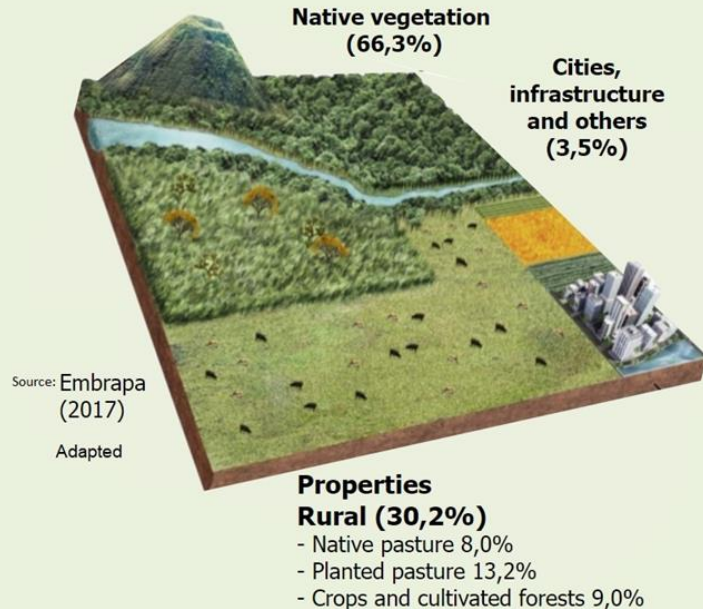
According to the Brazilian Institute of Geography and Statistics (IBGE), the Amazon biome has an approximate area of 4,196,943 km².

More than 49% of the Brazilian territory.

Sourced from: site "[The True Size](#)", accessed on March, 2023.



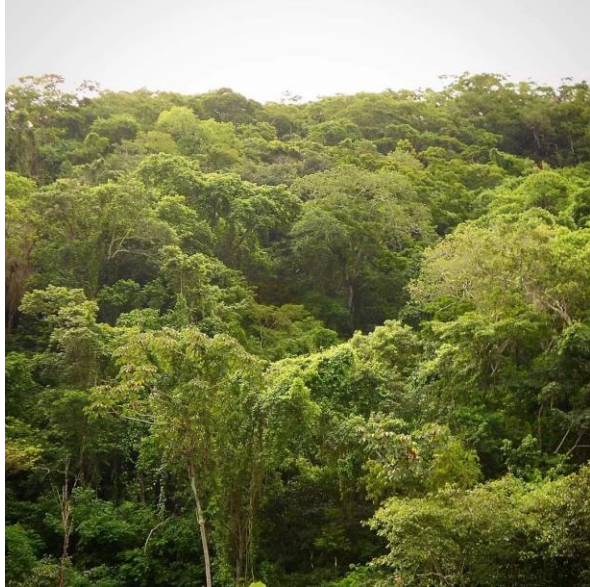
Land use in Brazil - From food insecurity to world barn



- 2nd largest producer of biotech crops in the world (KPMG, 2019)
- 58th defensive use ranking kg / ton (FAO 2016)
- Exports to over 220 countries (MAPA, 2019)
- 35.8 million hectares of soybean grown in 2018 received no nitrogen fertilizer (62 million tons of CO2 equivalent)
- In 2019, Embrapa launched a microorganism inoculant capable of replacing up to 50% of phosphorus application in our soils..

Sourced from the presentation “**MAINSTREAMING BIOECONOMY TO LEVERAGE SUSTAINABLE DEVELOPMENT**” from **Fernando Camargo - Secretary of Innovation, Rural Development and Irrigation/MAPA - 2021.**

UNECE Standard for Certain Small Fruits



United Nations



Economic and Social Council

ECE/CTCS/WP.7/2022/7

Distr.: General
5 September 2022

Original: English

Economic Commission for Europe

Steering Committee on Trade Capacity and Standards

Working Party on Agricultural Quality Standards

Seventy-seventh session

Geneva, 14–16 (a.m.) November 2022

Item 6 of the provisional agenda

Specialized Section on Standardization of Fresh Fruit and Vegetables (GE.1)

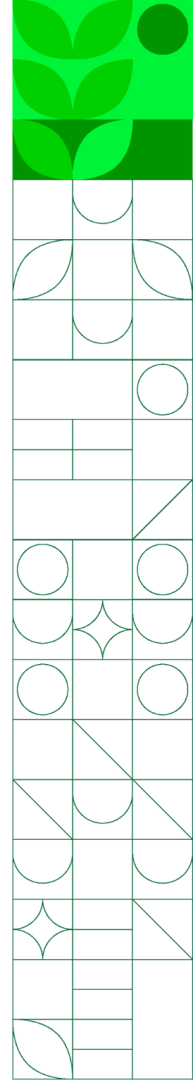
Certain small fruits

Submitted by the secretariat

The following document is submitted to the Working Party for adoption as a United Nations Economic Commission for Europe (UNECE) recommendation for certain small fruits for a one-year trial period.

The document is based on the document ECE/CTCS/WP.7/GE.1/2022/INF.5 and additional modifications agreed during the 2022 session of the Specialized Section on Standardization of Fresh Fruit and Vegetables (GE.1).

This document is submitted according to ECE/CTCS/WP.7/2021/2 – paragraph 66, ECE/CTCS/2021/2 – Decision 2021-07-02 and Decision 2021-07-07, and A/76/6 Section 20.



UNECE Standard for Certain Small Fruits



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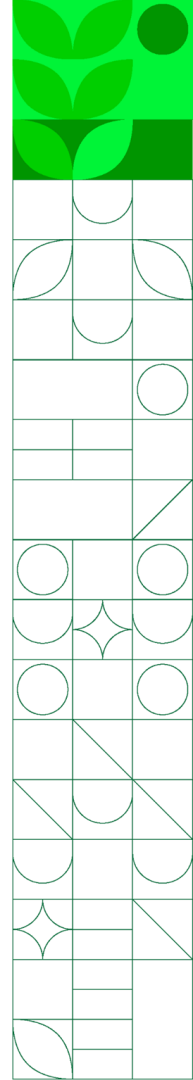
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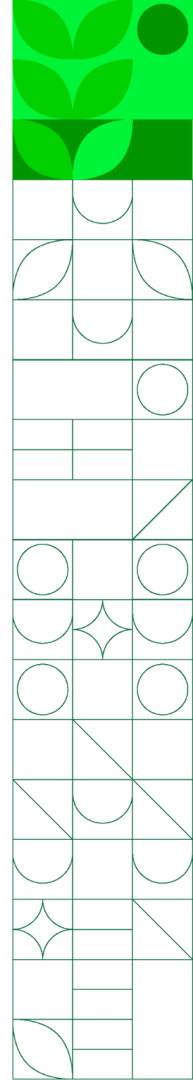
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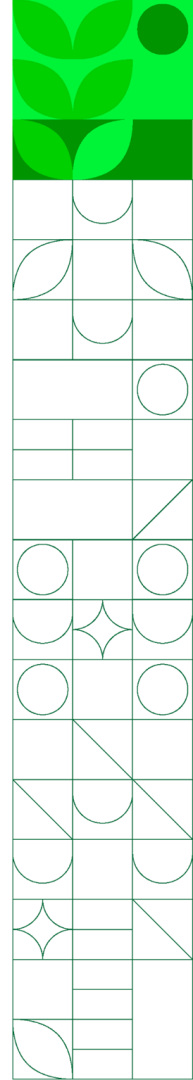


UNECE Standard for Certain Small Fruits

- I. Definition of produce
 - Listed fruits, common names followed by the scientific nomenclature*
- I. Provisions concerning quality
 - A. Minimum requirements
 - B. Maturity requirements
 - C. Classification
 1. "Extra" Class
 2. Class I
 3. Class II
- II. Provisions concerning sizing
- III. Provisions concerning tolerances
- IV. Provisions concerning presentation
- V. Provisions concerning marking



Source: Guilherme - Vigiagro/MAPA.



UNECE Standard for Certain Small Fruits

[UNECE Standard for Certain Small Fruits](#). Approved at the 80th Session of the Working Party 7 - UNECE (November 2022).



Not free from damage caused by pests affecting the flesh



Not intact (bruise)



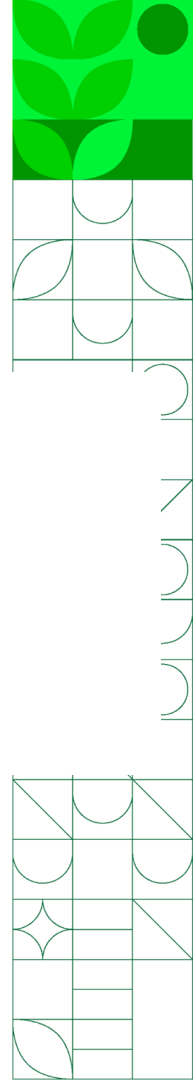
Lack of freshness



Not sound (rot)

A. Minimum requirements In all classes, subject to the special provisions for each class and the tolerances allowed, the small fruits must be:

Source: [Ceagesp guide for Jabuticaba](#)



UNECE Standard for Certain Small Fruits

[UNECE Standard for Certain Small Fruits](#). Approved at the 80th Session of the Working Party 7 - UNECE (November 2022).



Lack of freshness
(overripe)



Not intact
(bruise)



Not sound
(rot)



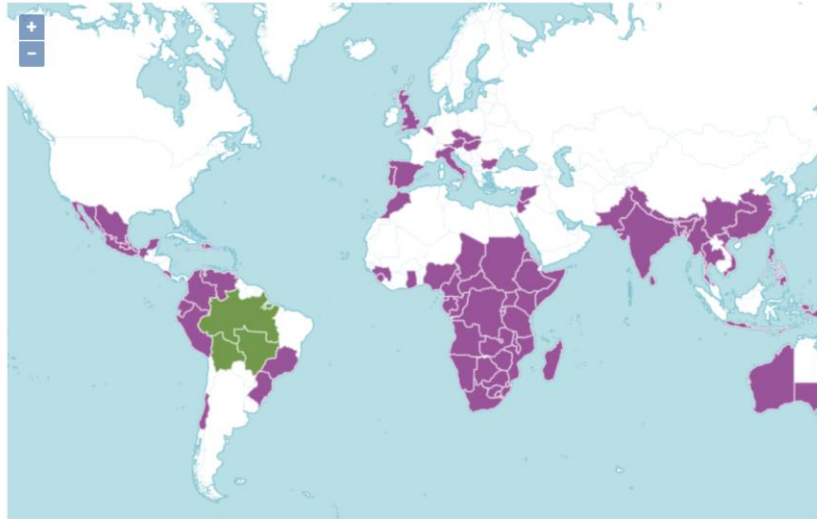
Not free from damage
caused by pests
affecting the flesh

A. Minimum requirements In all classes, subject to the special provisions for each class and the tolerances allowed, the small fruits must be:

Source: [Ceagesp guide for Barbados cherry](#)



Distribution of *Physalis* and *Jabuticaba* worldwide.



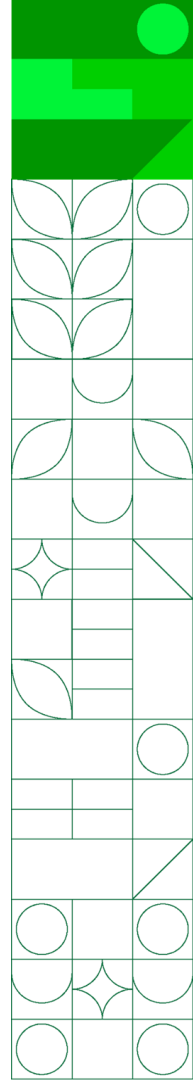
■ Native ■ Introduced

Source: <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:195473-2>



■ Native ■ Introduced

Source: <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:195473-2>



Distribution of Jelly palm and Nance worldwide.



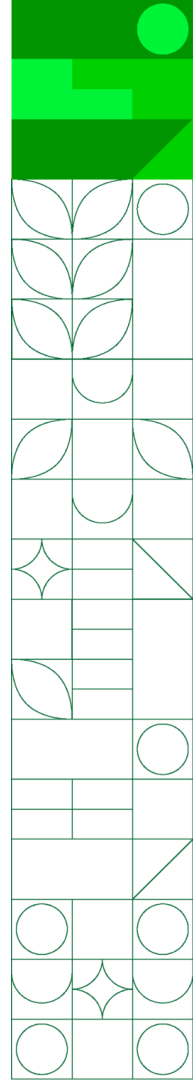
■ Native

Source: <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:38705-2>



■ Native

Source: <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:556033-1>

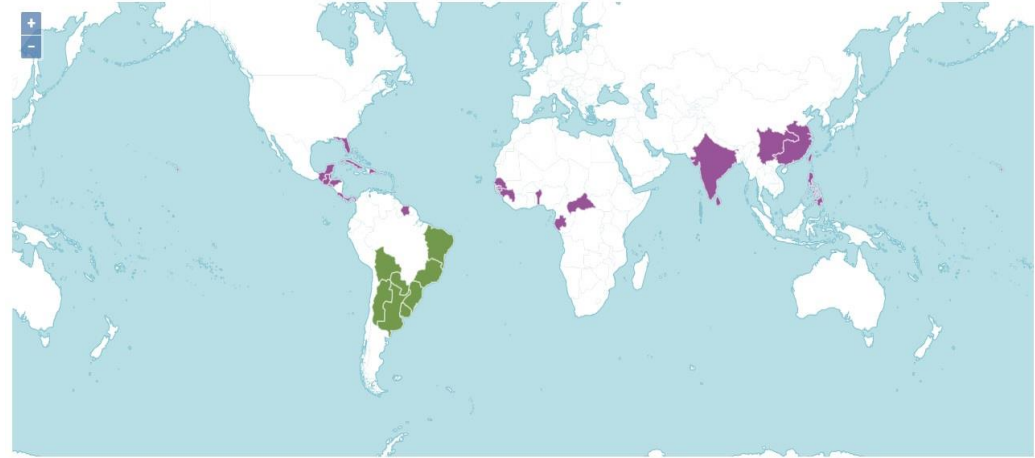


Distribution of Brazil Cherry and Surinam Cherry worldwide.



■ Native ■ Introduced

Source: <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:593822-1>

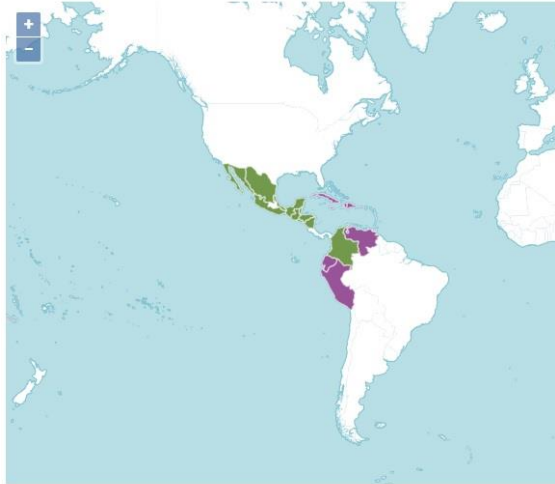


■ Native ■ Introduced

Source: <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:596263-1>



Distribution of Barbados Cherry and Camu-Camu worldwide.



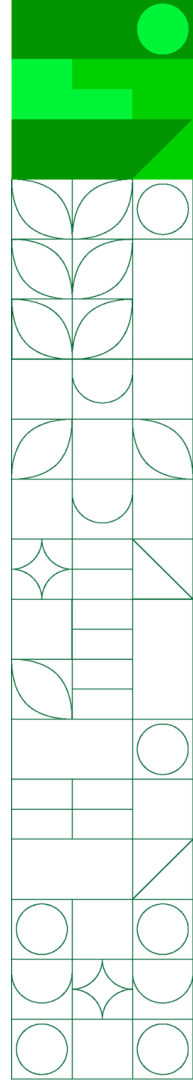
■ Native ■ Introduced



■ Native

Source: <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:323670-2>

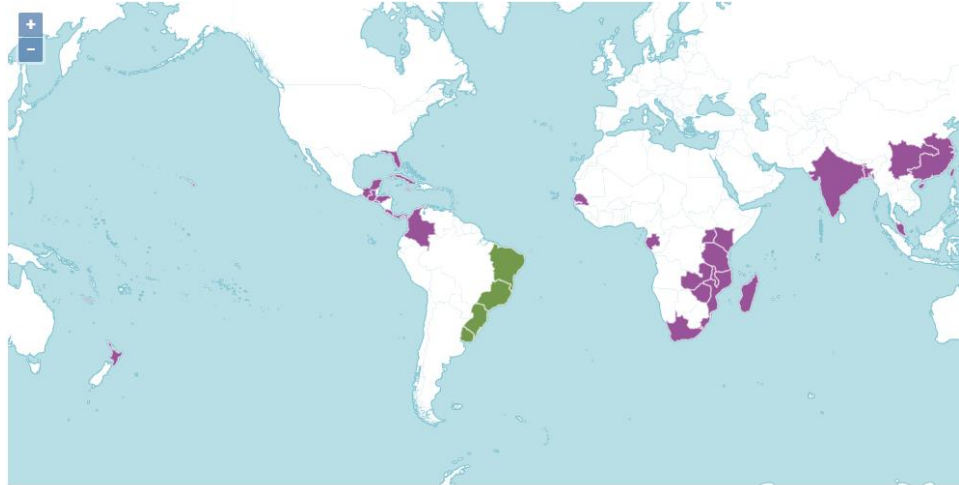
Source: <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:166146-2>



Distribution of Imbu and Strawberry guava worldwide.



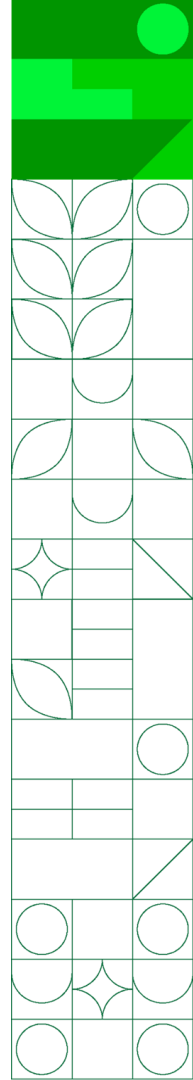
■ Native



■ Native ■ Introduced

Source: <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:71506-1>

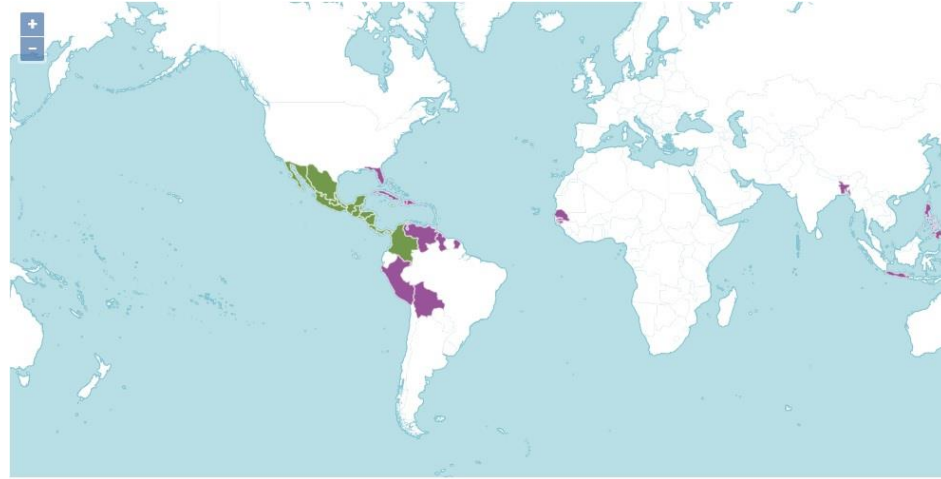
Source: <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:600760-1>



Distribution of Marula and Spanish plum worldwide.



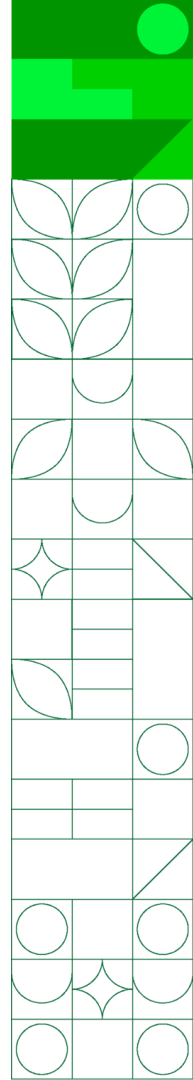
■ Native



■ Native ■ Introduced

Source: <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:71162-1>

Source: <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:71494-1>



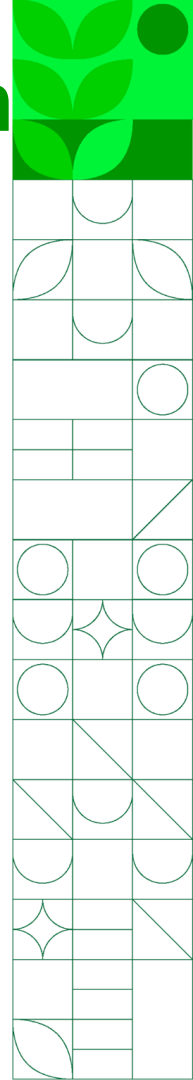
UNECE Standard for Certain Small Fruits

The Standard was approved by the Specialized Section on Fresh Fruits and Vegetables of UNECE for a one-year round for further collaboration and adjustments. It is possible to include small fruits such as Açaí and Bacuri, *well known fruits from the amazonian region*, among others.



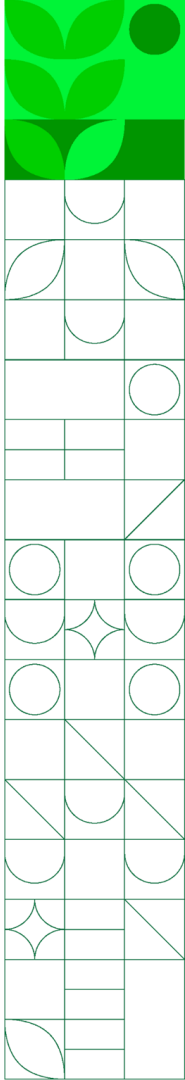
Why having a UNECE' Standard for such exotic and low traded fruits?

- Valuable characteristics are key to promote the future of those fruits
 - fresh,
 - healthy
 - delicious
- This was the case in the initial years for most of the currently worldwide traded Berry fruits.
- The Specialized Section on Fresh Fruits and Vegetables' support to this proposal was a humbled recognition, as well as a powerful movement to amplify the intent to the knowledge of all the listed Certain Small Fruits in the Standard.



Valuable characteristics to promote the future of small fruits

	<i>Physalis peruviana</i>	Jabuticaba	Umbu	Camu	Bahamas cherry	Surinam cherry	Brazil Cherry	Craboo or Nance	Strawberry guava	Jelly palm	Reference values
Dietary fiber (g)	6.5	3.7	2	n.a.	n.a.	3.5	1	n.a.	8.1	3.6	2.4 (blueberry)
Vitamin C (mg)	17.72	37.67	14.97	1600-2500	1300	26.3	n.a.	n.a.	3.6	22.69	53.2 (orange)
Total fenolics (µg)	n.a.	n.a.	n.a.	n.a.	n.a.	6.67	n.a.	n.a.	n.a.	n.a.	
Quercetin (mg)	n.a.	1.1	55	4.1	n.a.	6.2	n.a.	n.a.	n.a.	n.a.	13.2 (apple)
Total polyphenol (mg)	n.a.	440	n.a.	1100-1800	1300-2200	n.a.	n.a.	n.a.	n.a.	n.a.	1839(grape peel)
beta-Carotene (µg)	1909	84	17	140	6100	510	31	n.a.	53	1648	7400(carrot)



Why having a UNECE' Standard for such exotic and low traded fruits?

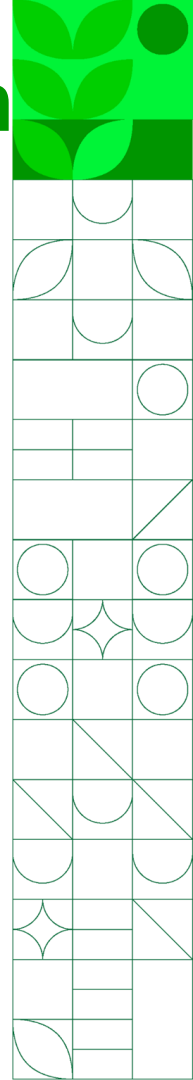
Small fruits are considered convenience and highly productive produce that improve resilience to farmers as being alternatives sources of income.



O fruto que se perdia
Agora é alimento
E contribui pro sustento
Do povo do CARIRI
Temos visto por aqui
O fruto em transformação
Ocupando muitas mãos
E elevando a economia
O fruto que se perdia
Agora virou sustento

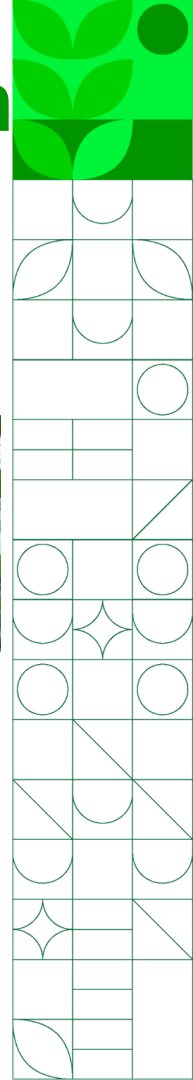


There are many well known small fruits from the Amazon rainforest and other threatened biodiversity hubs that may benefit from this effort.



Why having a UNECE' Standard for such exotic and low traded fruits?

The Standard for Certain Small fruits is a sustainable and forward-looking alternative for the resilience and protection of threatened environments.

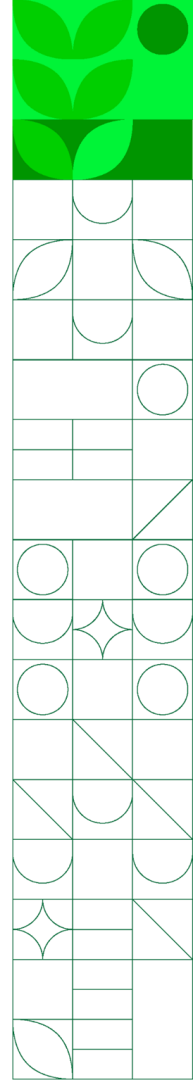


UNECE' Standard for exotic fruits

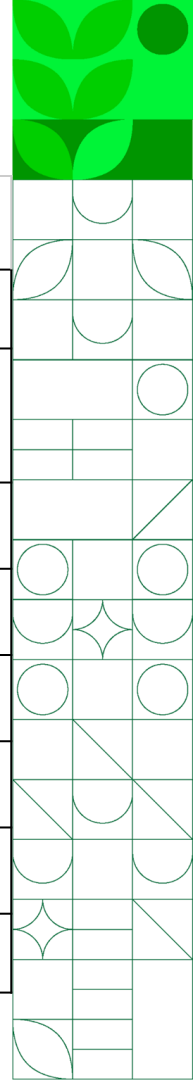
Trade volumes of Small fruits in the Brazilian Wholesale market (2022)*	
Product	Quantity (Kg)
Acerola	58,207,813
Jabuticaba	15,342,467
Spanish plum	7,039,192
Umbu	1,694,803
Physalis	582,757
Craboo (Nance)	53,440
Barbados Cherry	43,860
Reference	Papaya (2,203,562,185Kg) Pineapple (1,821,091,250Kg)

Source: <http://dw.ceasa.gov.br/>

*
- Supermarket chains not included.



UNECE' Standard for exotic fruits

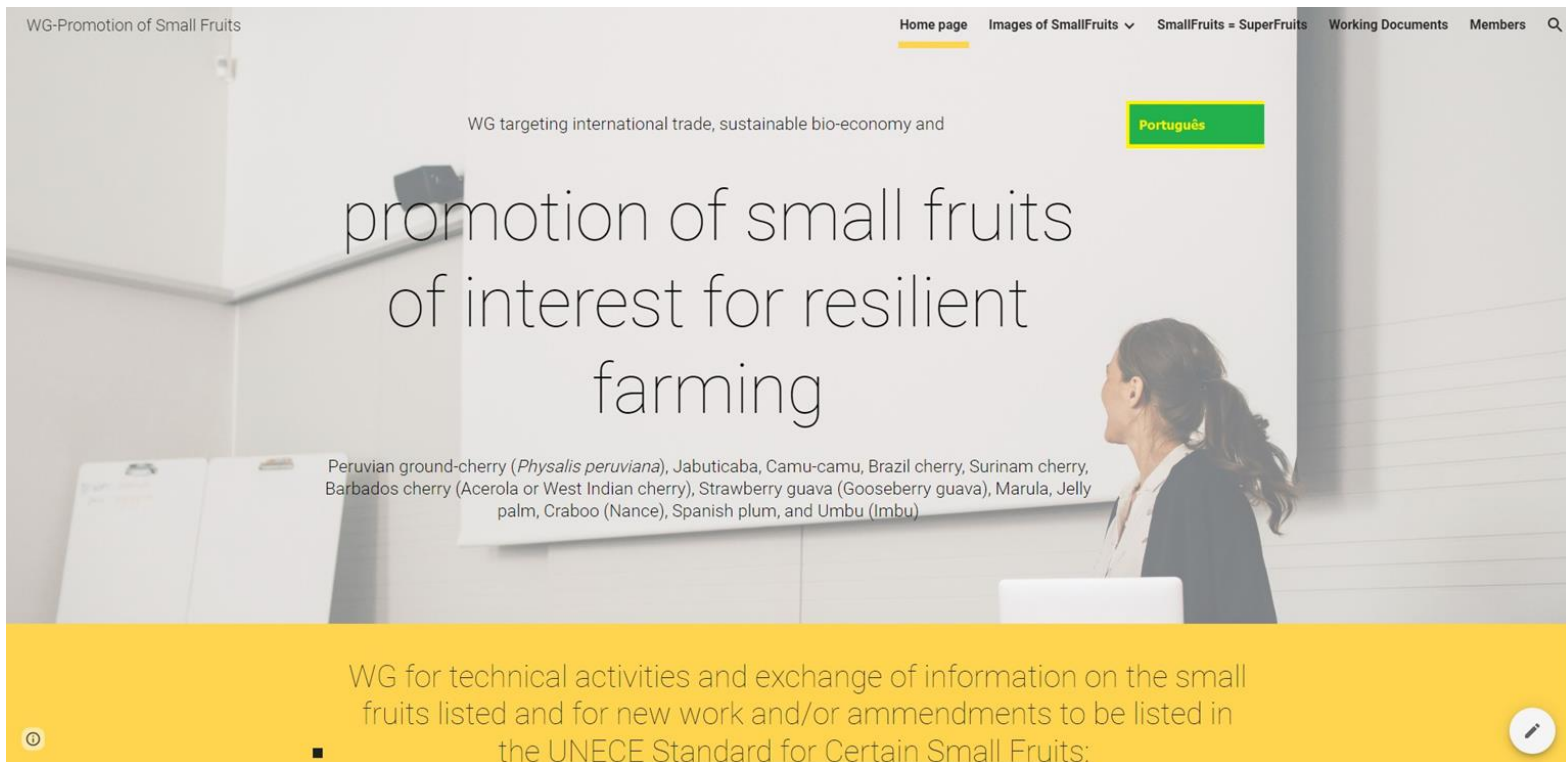


Number of farmlands or sites by color or race of the farmer or picker - Brazil 2017 Statistics Data

Wild picker or collector, products	Wild plant products picking and collect, frequency of farmlands or sites					
	White	Black	Yellow	Mixed	Native indian	Not applicable
Brazil						
Jelly palm fiber - Butiá (fibra)	119	3	-	34	2	-
Camu-camu (fruto)	4	1	1	46	125	-
Craboo or Nance fruit - Murici (fruto)	399	258	11	1,320	288	2
Umbu or Imbu fruit - Umbu (fruto)	4,390	1,489	122	8,370	141	7

Source: IBGE, Censo Agropecuário - 2017

How?



WG-Promotion of Small Fruits

Home page Images of SmallFruits ▾ SmallFruits = SuperFruits Working Documents Members 🔍

WG targeting international trade, sustainable bio-economy and

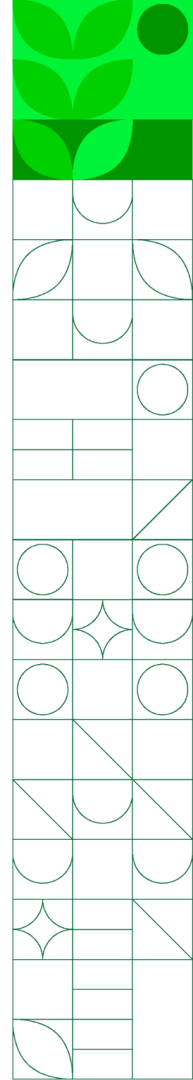
Português

promotion of small fruits of interest for resilient farming

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WG for technical activities and exchange of information on the small fruits listed and for new work and/or amendments to be listed in the UNECE Standard for Certain Small Fruits:

©





Credit: Umbu Whatsapp Group



Credit: Umbu Whatsapp Group



Credit: Umbu Whatsapp Group



Credit: Ceagesp



Credit: MAPA



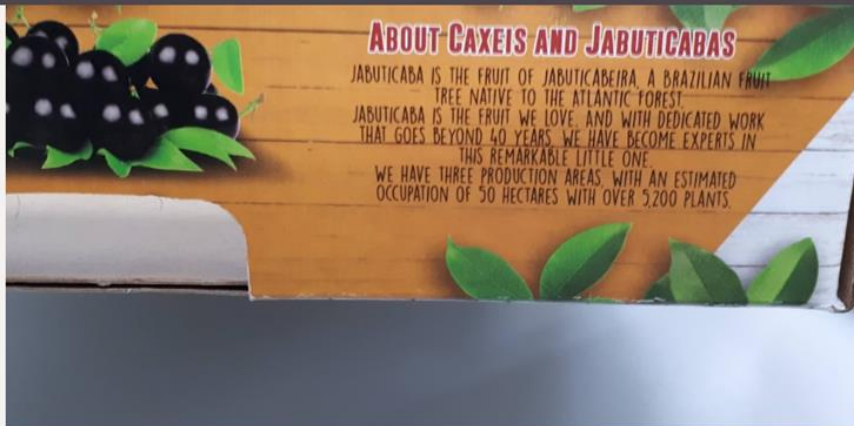
Credit: MAPA





Foto: J. F. Fortes

Credit: Joel F. Fortes



Credit: MAPA

