

Bridging the gap: Building capacities and networks to analyze and use nutrient data on edible biodiversity in Brazil



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Introduction

Brazil is home to the world's greatest biodiversity, much of it edible and nutritious, yet neglected and underutilized. Nutritional data about native edible biodiversity is scarce and a comprehensive online food composition database does not exist. Further, the environment, agriculture, health and other sectors are disconnected, limiting opportunities to promote this edible biodiversity.

The Biodiversity for Food and Nutrition (BFN) Project, a multi-country project, has been working to address these challenges in Brazil by improving the enabling environment for edible biodiversity by: improving the evidence base by undertaking composition analysis of about 70 prioritized species; strategically targeting policy instruments with the greatest potential for diversifying public food procurement and improving diets while supporting family farming; and, improving national capacity, partnerships and awareness through alliances with universities, government sectors, civil society, chefs, nutritionists and dieticians and others.

Methods

Nutritional Composition:

- Species selected based on socioeconomic criteria by the *Plants for the Future*² initiative.
- Data compilation and laboratory analysis using methodologies and guidelines developed by FAO/INFOODS³.
- Data will be available in Nutritional Biodiversity Database of the *Information System of Brazilian Biodiversity* (SiBBR)⁴.

Capacity building:

- Postgraduate training, workshops with students and professors
- Online course to mainstream biodiversity into agriculture, nutrition, public health and other sectors.



Figure 1 – Underutilized fruits from Brazilian native biodiversity

*Short for the *Mainstreaming Biodiversity Conservation and Sustainable Use for Improved Nutrition and Well-Being** initiative. Led by Brazil, Kenya, Sri Lanka and Turkey and funded by the Global Environment Facility, the project is coordinated by Bioversity International with implementation support from UNEP and FAO.

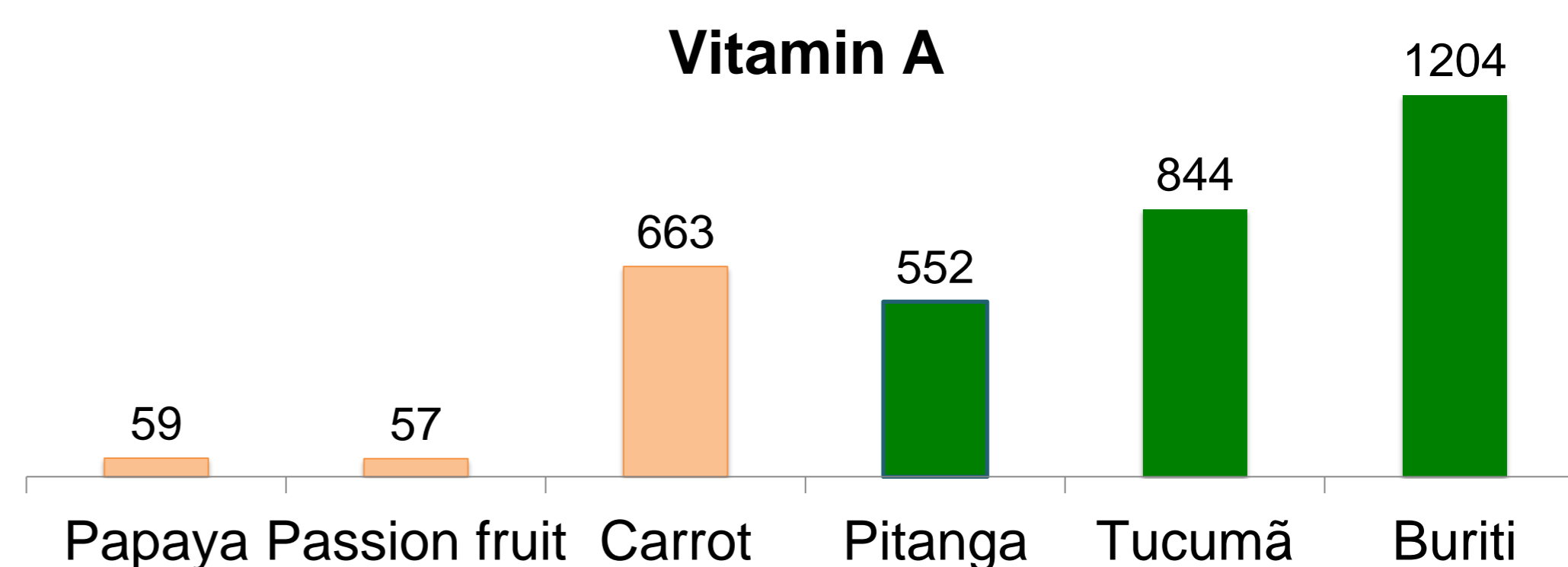


Figure 2 – Content of vitamin A (mcg RAE/100 g edible portion) in fruits commonly consumed (orange) and underutilized fruits native from Brazil (green)

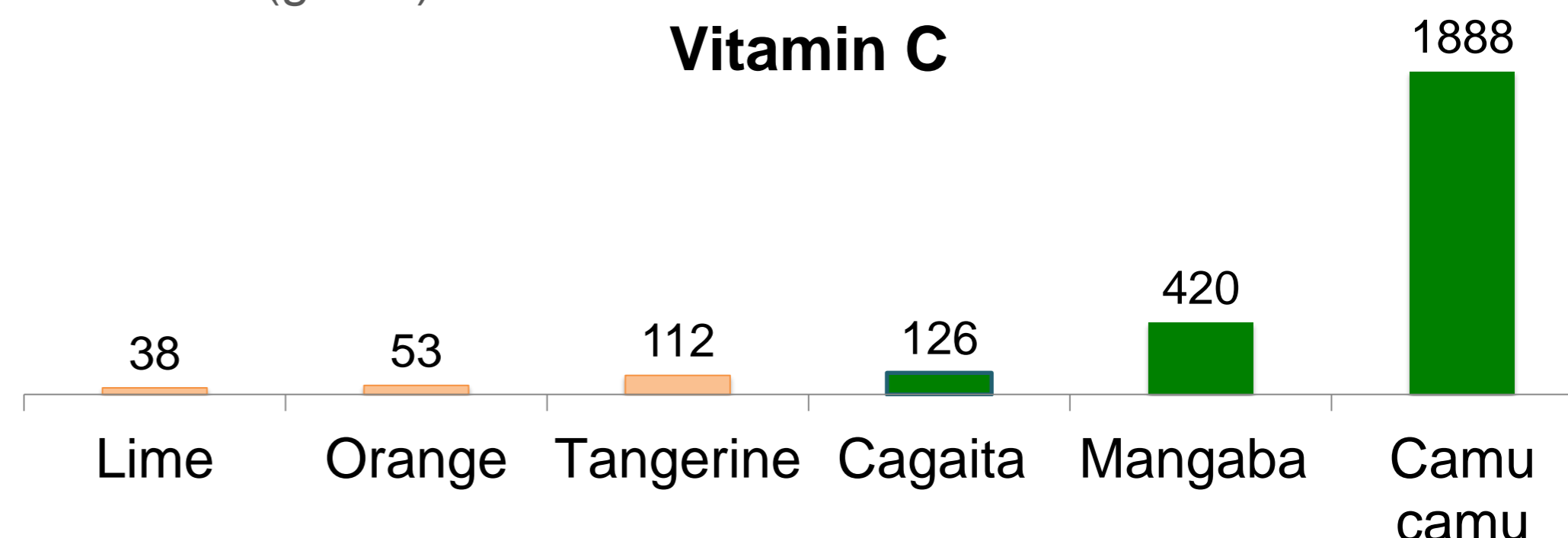


Figure 3 – Content of vitamin C (mg/100 g edible portion) in fruits commonly consumed⁵ (orange) and underutilized fruits native from Brazil (green)

Results and conclusions

- Nutritional composition data was found and compiled for 49 of the 70 species. Data available in literature is limited, especially on fibre, vitamin and mineral content.
- Data generated seems to indicate Brazilian underutilized native fruits have superior nutritional content compared to more commonly consumed fruits.
- BFN is developing regional capacities and creating a network of researchers to better promote nutritious native species.

References

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