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Market research: characterization of the vanilla consumer and non-consumer market

Pesquisa mercadológica: caracterização do mercado consumidor e não consumidor de baunilha

Estudio de marketing: caracterización del mercado de consumidores y no consumidores de vainilla

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Abstract
Market research makes it possible to obtain important information and data for management and development in the industry. In this view, the main objective of this research was to obtain the profile of consumers and non-consumers of vanilla. This is because vanilla is one of the most important spices for the food industry, and in Brazil, despite having species of market potential, the import and use of artificial vanilla is what predominates. Therefore, an online questionnaire was applied to obtain information about the vanilla scenario in Brazil. The results showed that the most respondents are consumers of vanilla essence, and most of them do not know vanilla in its natural form, and also do not have the habit of consuming it, with the main justifications being the lack of availability and the price. Natural vanilla consumers earn the highest income and live in regions where vanilla species occur, which facilitates access. A big number of people consume products that contain vanilla, evidencing the importance of the spice for the industry. Regarding Brazilian vanilla species, most did not know or said they did not exist. The results of this research make evident the importance of disseminating information about native vanilla species and their potential, since most respondents were willing to buy Brazilian vanilla. Therefore, encouraging research and production is of paramount importance for the recognition of Brazilian vanilla species.
Keywords: Vanilla; Market research; Consumer; Native species; Brazil.

Resumo
A pesquisa de mercado possibilita a obtenção de informações e dados importantes para a gestão e desenvolvimento na indústria. Nesta visão, a referente pesquisa teve como principal objetivo obter o perfil dos consumidores e não consumidores de baunilha. Isto porque, a baunilha é umas das especiarias mais importantes para a indústria de alimentos, e que no Brasil mesmo tendo espécies de potencial mercadológico, a importação e o uso da baunilha artificial é o que predomina. Sendo assim, foi aplicado um questionário online para obtenção de informações sobre o cenário da baunilha no Brasil. Os resultados demostraram que a maioria dos respondentes são consumidores de essência de baunilha, e grande parte não conhece a baunilha em sua forma natural, e também não têm o hábito de consumir, tendo como principais justificativas a falta de disponibilidade e o preço. Os consumidores de baunilha natural obtêm a maior renda e moram em regiões em que ocorrem espécies de baunilha, o que facilita o acesso. A maioria consome produtos que contém baunilha, evidenciando a importância da especiaria para a indústria. Em relação as espécies de baunilha brasileiras a maioria não sabia ou disseram não existir. Os resultados desta pesquisa, deixam evidentes a importância de disseminar informação sobre as espécies de baunilhas nativas e seu potencial, visto que a maioria dos respondentes

mostraram- se dispostos a comprar baunilhas brasileiras. Sendo assim, o incentivo a pesquisa e a produção são de suma importância para o reconhecimento das espécies de baunilhas do Brasil.
Palavras-chave: Baunilha; Pesquisa de mercado; Consumidor; Espécies nativas; Brasil.

Resumen
El estudio de mercado permite obtener información y datos importantes para la gestión y el desarrollo en la industria. Desde este punto de vista, esta investigación tenía como objetivo principal obtener el perfil de los consumidores y nos consumidores de vainilla. Esto se debe a que, la vainilla es una de las especias más importantes para la industria alimentaria, y que en Brasil, a pesar de tener especies con potencial de mercado, lo que predomina es la importación y el uso de vainilla artificial. Por lo tanto, se aplicó un cuestionario en línea para obtener información sobre el escenario de la vainilla en Brasil. Los resultados mostraron que la mayoría de los encuestados son consumidores de esencia de vainilla, y la mayoría de ellos no conocen la vainilla en su forma natural, y tampoco tienen el hábito de consumirla, teniendo como principales justificaciones la falta de disponibilidad y el precio. Los consumidores de vainilla natural son los que obtienen mayores ingresos y viven en regiones donde hay especies de vainilla, lo que facilita el acceso. La mayoría consume productos que contienen vainilla, lo que pone de manifiesto la importancia de esta especia para la industria. En cuanto a las especies de vainilla brasileñas, la mayoría no las conocía o decía que no existían. Los resultados de esta investigación demuestran la importancia de difundir información sobre las especies autóctonas de vainilla y su potencial, ya que la mayoría de los encuestados estaban dispuestos a comprar vainilla brasileña. Por lo tanto, el incentivo a la investigación y la producción es de suma importancia para el reconocimiento de las especies de vainilla brasileñas.
Palabras clave: Vainilla; Estudio de mercado; Consumidor; Especies autóctonas; Brasil.

1. Introduction

Market research is an important marketing tool for the food industry, being able to express and monitor changes in consumer behavior, desires or needs (Carvalho et al., 2015). The results obtained contribute to generate solid information for the industry and outline possible sales strategies, thus meeting the demands of the current consumer, who is increasingly concerned with product quality and its impacts on health and the environment (Carvalho et al., 2018; Mesías et al., 2021).

Through market research it is possible to obtain information about the profile of consumers, their expectations, satisfaction, habits and attitudes towards products, and the reasons that lead them to buy, thus helping innovation, development and generation of new products. products, within the industry (Gonçalves et al., 2018). According to Velema et al., (2019) "qualitative research is a flexible and adaptable approach", and makes it possible to generate information and communicate the results and their implications to the public of interest.

Vanilla is the second most expensive spice in the world, and is widely used by the food industry, in the bakery, confectionery and ice cream industries. The Vanilla planifolia species is the most commercialized, due to its flavoring power, corresponding to 75% of world production (Brumano, 2019), with Madagascar providing about 80% of vanilla production in the world. However, due to supply limitations, the use of artificial vanilla is very common. The main compound vanillin present in the cured fava beans can be obtained in a more accessible way, by chemical processes in the laboratory (Walton et al., 2000; Wilde et al., 2019).

In Brazil, despite the presence of species with high potential, the lack of information and incentive to production does not contribute to the possible valorization of native vanillas. The import of natural vanillas and the use of artificial essence are still predominant in the country (Camilo et al., 2016; Brumano, 2019). Although there is no organization of the production chain, the spice has a market perspective. However, there are few works aimed at knowing the national vanilla market.

That said, in this study an exploratory research was carried out, through an online questionnaire, with the objective of knowing the profile of consumers of essence and natural vanilla, the relationship of consumption of products that contain vanilla, and the reasons for not consuming natural vanilla. In addition, we sought to survey the knowledge of the population about native vanillas in order to contribute to the dissemination of information about Brazilian vanillas, encouraging production, consumption and consequently their appreciation.

2. Material and Methods

In the present work, market research was used to gather information about the scenario of vanilla consumption in Brazil, for this an exploratory and descriptive research was carried out, data were collected through a questionnaire and evaluated through statistical tests non-parametric (Gonçalves et al, 2018).

2.1 Sample and data collection

To define the sample size, the simple random sample formula was used for infinite populations (Gonçalves et al, 2018), (Equation 1) (N < 10000, Brazil has 213.3 million inhabitants, according to the estimate of the Brazilian Institute of Geography and Statistics (IBGE) (Brazil, 2021), with a confidence level of 95%, and a margin of error (E) of 0.05. As the objective was to obtain information from the general population, the p and q values as 0.5.

n=q×p×z2E2 Equation 1.

on what:

n = minimum size of the sample space;

Z= 1.96 (abscissa of the normal distribution at a confidence level of 95%);

p =0.5 (maximum estimated variability);

q = 1 - p;

E = 0.05 (level of precision).

Therefore, an intentional, statistically significant random sample, composed of 384 consumers, would be sufficient to carry out the research. However, 616 individuals were interviewed in the period between August and October 2021, residing in the federative units of Brazil.

The questionnaire was prepared in the Google Forms® application of Google Drive®. For the dissemination of the questionnaire, social networks and e-mail lists of individuals were used. Respondents were questioned using a structured form of an exploratory nature. The summary of the content of the questions is shown in Table 1.

Before starting to answer the questions, the participants were exposed to the first section, which contained the free and informed consent form, and after reading it, they had to agree to continue participating in the research to proceed to the next section.

The first part of the questionnaire consisted of socio demographic questions, such as gender, age, income, state of residence, education and area of activity.

After filling in the sociodemographic profile section, the participants answered another section about the consumption of vanilla essence, with the same answering the reason for consumption, or not consuming it, and also about their knowledge regarding the composition of this type of product.

Table 1. Summary of questions presented to research participants.

Question content*
Free and Informed Consent Term (ICF)
Demographics (Gender, Age, Income, State, Education and Area of Activity)
Are you a vanilla essence consumer?
For what reason(s) do you consume vanilla essence?
For what reason(s) do you not consume vanilla essence?
What is the composition of this type of product?
Do you know natural vanilla?
Is Brazil a vanilla producer?
Would you buy Brazilian vanillas?
Are you a natural vanilla consumer?
For what reason(s) do you not consume natural vanilla?
Do you buy products that contain vanilla?
What products do you like the addition of vanilla to?
What sensory attributes would you use to describe the flavor (aroma) of vanilla:

*Closed questions with answers according to each question. Source: Authors (2021).

The next section consisted of questions related to knowledge of natural vanilla and its consumption, and about the production of vanilla in Brazil, and also about the reason for not consuming natural vanilla. Finally, the last part referred to questions such as: consumption of products that contain vanilla, and which attributes the respondents would use to describe the aroma and flavor of vanilla.

2.2 Data analysis

The evaluation was carried out through descriptive exploratory analysis of the data referring to the questionnaire applied to verify the behavior regarding the distribution, frequency and variability of the data.

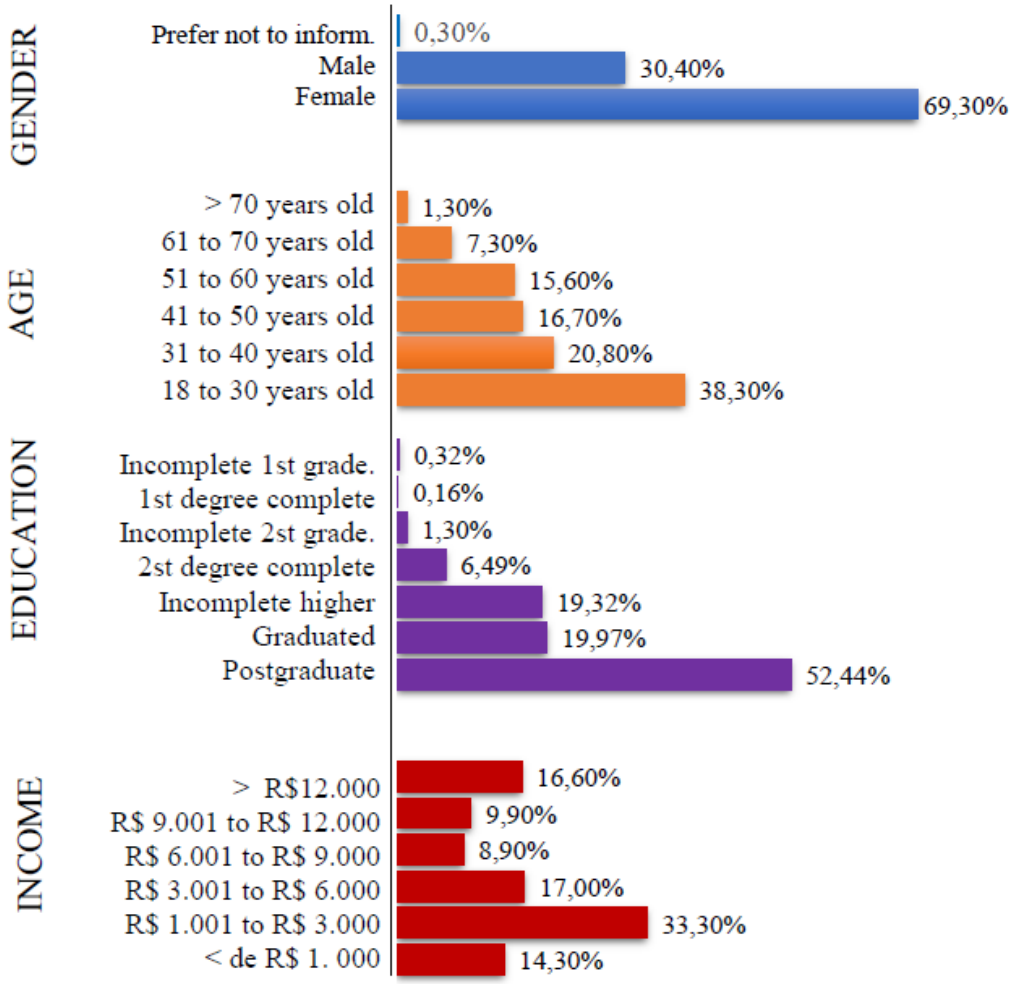
The chi-square was calculated to assess the differences in the consumption of essence and natural vanilla according to the socioeconomic characteristics of the interviewees. The Chi square statistic is used to test statistical significance between the frequency distributions of two or more groups by comparing the observed (actual) frequencies of the responses with the expected frequencies. These are calculated using the total sample percentages and the sample size. Cross-tabulation is also an excellent way to analyze the results to assess the degree of relationship or association between variables (Gonçalves et al., 2013).

The operational procedures of analysis were performed with the help of SPSS (Social Package Statistical Science)28.0® and Microsoft Excel® software.

3. Results and Discussions

Respondents ranged in age from 18 to over 70 years, with a mean of 38.48 years and standard deviation of 14.7 years, female predominance (69.30%), and postgraduate education level (52 .44%), followed by incomplete and complete higher education (39.29% adding the two levels of education), and with a predominant income of 1,000 to 3,000 reais (Figure 1).

Figure 1. Profile of the total number of respondents to the questionnaire expressed as a percentage.



Source: Authors (2021).

According to the Brazilian Institute of Geography and Statistics (IBGE) (Brazil, 2021) the population over 30 years of age grew in 2019, reaching 57.7%, with most concentrated between 35 and 39 years old, close to mean age of respondents (38.48 years) – indicative of sample likelihood. Respondents mostly reported income equivalent to classes C2 and B1 according to the Brazilian Economic Classification Criteria (PNADC, 2018), demonstrating the diversification of respondents in relation to socioeconomic class.

Respondents from all regions of Brazil had access to the questionnaire. Table 2 shows the percentage distribution of respondents by region, with the percentage of distribution of the Brazilian population. The Southeast region, which concentrates most of the Brazilian population, had the largest number of respondents, followed by the Midwest and Northeast regions.

Table 2. Distribution of respondents and the Brazilian population, expressed as a percentage, by regions of the country.

Regions of Brazil	% of respondents	% of inhabitants per region*
North	0,97	8,82
Northeast	11,36	27,09
Midwest	18,99	7,79
Southeast	62,82	42,04
South	5,84	14,26
Total	**100,00**	**100,00**

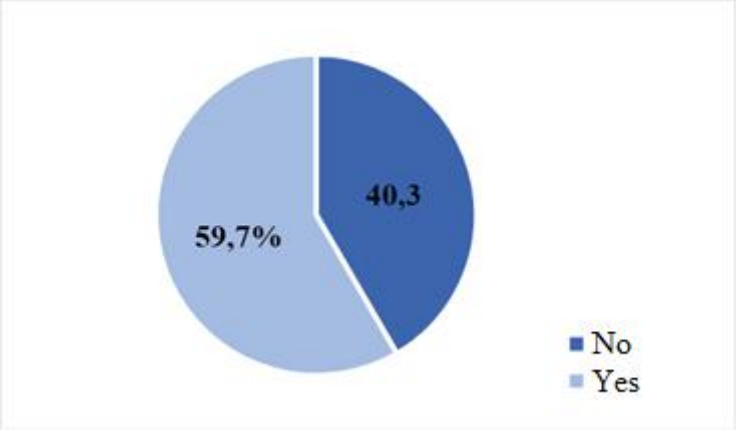
Source: Author data, *Demographic Census Data (IBGE, 2020).

3.1 Consumption of vanilla essence

Of the respondents, 59.7% (Figure 2) are consumers of vanilla essence, and reported having as their main motivation for consumption the fact that they like the aroma and flavor (Figure 3), more than 50% of the respondents marked these options. Accessibility, habit and price also stood out in the responses of consumers with percentages of 24.50%, 17.40% and 15.20%, respectively.

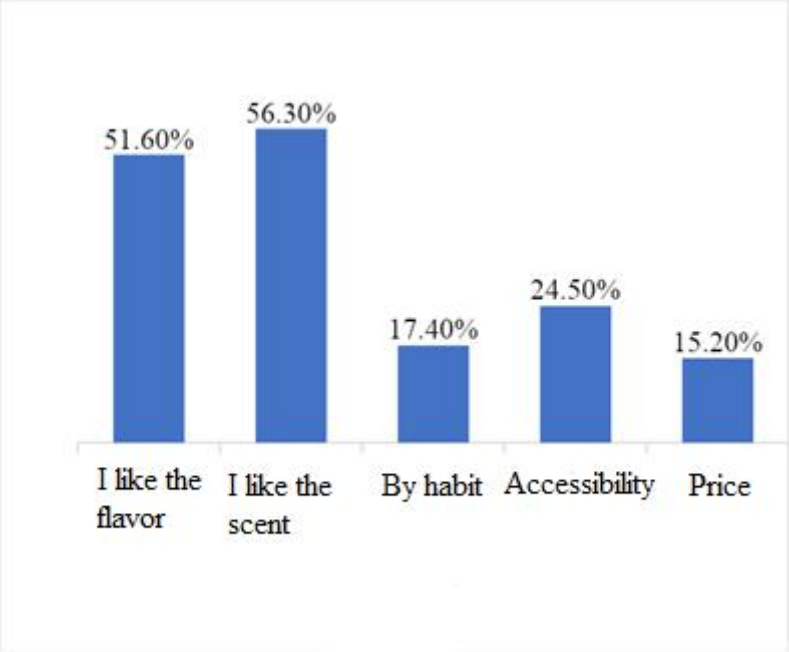
The high consumption of vanilla essence, in relation to natural vanilla, can be explained by the greater availability and lower prices of artificial essence, which makes the product more accessible and viable. The process of obtaining the essence through precursors and synthesis in the laboratory is much cheaper and faster than obtaining and extracting vanilla beans (Schipilliti et al., 2017).

Figure 2. Percentages of consumers and non-consumers of vanilla essence respondents.



Source: Authors (2021).

Figure 3. Main reasons for consumption of vanilla essence, expressed as a percentage.



Source: Authors (2021).

To assess the relationship between the consumption of vanilla essence and the sociodemographic data of the participants, the chi-square analysis was performed. Proper use of this analysis requires that each expected cell frequency have a sample size of at least 5 (Hair JR et al., 2007). Therefore, the age of over 70 years and the North region were removed as they did not reach more than 5 responses, not affecting the results of the analyzes (Table 3).

The results showed that sex, age and income have an influence on the consumption of vanilla essence ($p < 0.05$). The majority of consumers were female (43.8%), aged between 18 and 20 years (18.2%) and with an income from 1001 to 3000 reais. There was no significant effect of education, region and area of activity ($p > 0.05$) (Table 3). Evidencing the diversity of the vanilla essence consumer public.

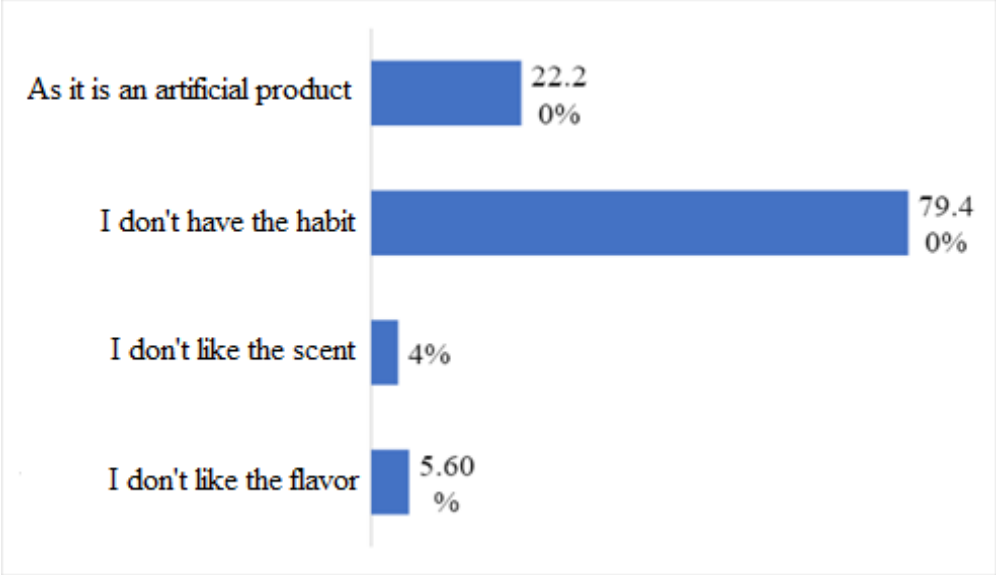
Table 3. Cross-tabulation between the consumption of vanilla essence and the socioeconomic variables of the Brazilian respondents, in percentage.

	% of participants in relation to consumption			
Variables	**Classification**	**Yes**	**No**	X^2
Gender	Female	43,8	25,7	6,686*
	Male	15,8	14,7	
Age	18 to 30 years old	18,2	20,1	30,644*
	31 to 40 years old	12,7	8,1	
	41 to 50 years old	11,5	5,2	
	51 to 60 years old	12	3,6	
	61 to 70 years old	4,5	2,8	
	Low	4,4	3,9	1,069^{ns}
Education	High	55,3	36,4	
	Less than R$ 1. 000	6,7	7,6	13,150*
Income	R$ 1.001 to R$ 3.000	18,9	14,3	
	R$ 3.001 to R$ 6.000	10,5	6,5	
	R$ 6.001 to R$ 9.000	5,7	3,2	
	R$ 9.001.to R$ 12.000	7,3	2,6	
	More than 12.000	10,5	6	
	Northeast	7,5	3,9	5,364^{ns}
Region	Midwest	12,2	6,8	
	Southeast	35,4	27,4	
	South	4	1,8	
Activity Area	Related to food	34,2	22,6	0,100^{ns}
	Other areas	25,5	17,7	

*significant at the 5% probability level. ns not significant a High level of education: undergraduate or graduate. Low education: elementary school, high school, vocational school or equivalent (ESPESCHIT, 2014).
Source: Author data.

Through the responses and profile of consumers of vanilla essence, it is clear that the product is used by diverse audiences, and that they like it because of its sensory characteristics, and that they are also influenced by accessibility, habit and price. In line with the fact that most of the vanilla sold in Brazil is in its artificial form (Brumano, 2019). And that is associated with the problem that more than 99% of vanillin, the main compound of vanilla, is obtained artificially, due to limitations in the supply of natural vanilla (Walton et al., 2000; Wilde et al., 2019) Regarding the respondents' reasons for not consuming vanilla essence (Figure 4), lack of habit represented 79.4% of the responses, and the fact that the product is artificial 22.20%. These values demonstrate that the lack of habit is the main factor for those who do not consume the product.

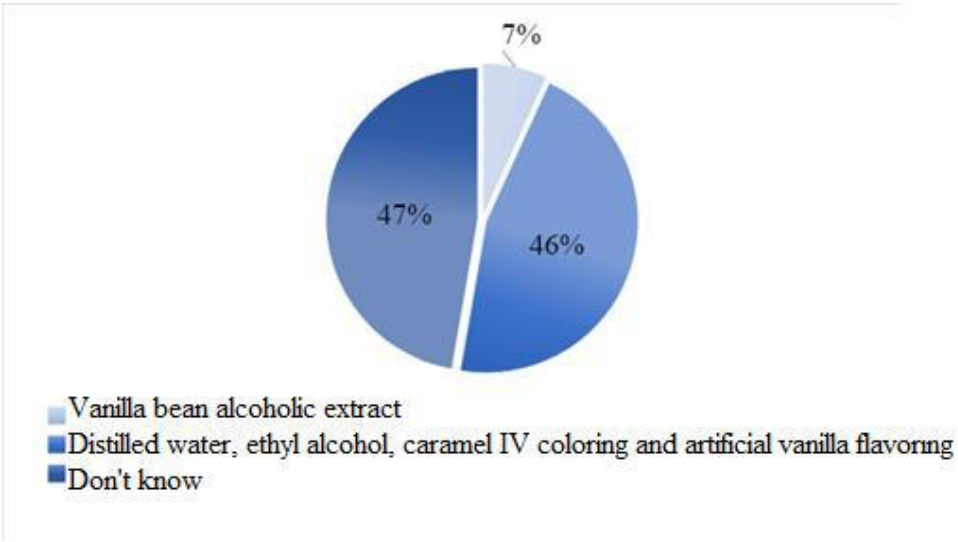
Figure 4. Reasons for not consuming vanilla essence, expressed as a percentage.



Source: Authors (2021).

Of the respondents, more than 54% (Figure 5) responded that the artificial essence is made by infusing vanilla pods in alcohol, or they do not know how to inform the composition of the product, thus demonstrating that people do not have knowledge regarding the composition of the product. itself, and who believe that the essence is obtained through the vanilla pods, and not through chemical precursors. Evidencing the importance of better informing consumers about food additives and their health effects (Gebhardrt et al., 2020).

Figure 5. Participants' knowledge regarding the composition of vanilla essence, expressed as a percentage.



Source: Authors (2021).

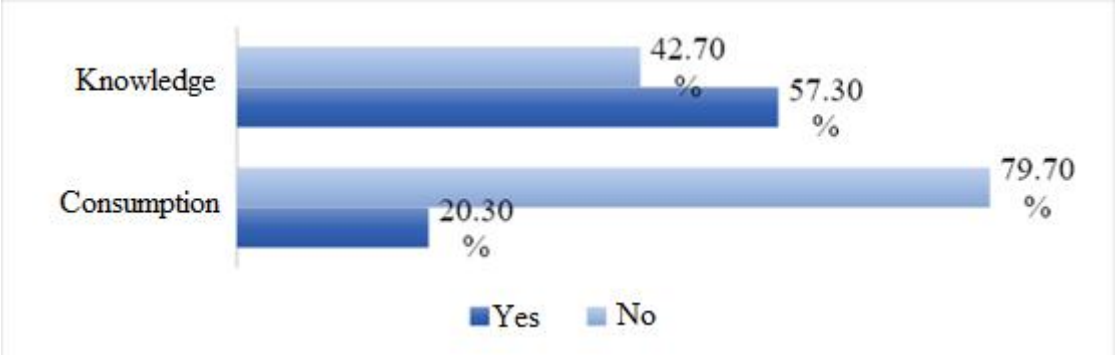
3.2 Knowledge and consumption of natural vanilla

Of the respondents, 57.3% (Figure 6) reported knowing natural vanilla, while 42.7% did not know, thus demonstrating their lack of information regarding natural vanilla, which can be associated with the habit of the Brazilian population in using the extract. artificial and do not know its composition or believe that it is obtained from vanilla pods (Figure 5). Regarding the

consumption of natural vanilla, as expected, a small percentage of respondents (20.3%) are consumers, while 79.7% reported not consuming natural vanilla, with the main reasons being the lack of availability (63.47 %), and price (23.47%) (Figure 8).

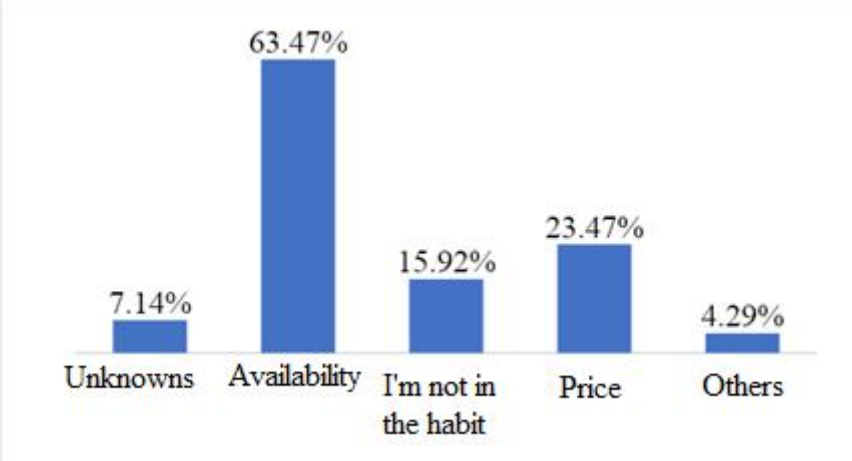
The results of this stage of the research are also consistent with the fact that most of the vanilla that is sold in Brazil is in its artificial or imported form, since more than half of the respondents do not know or consume natural vanilla. The high price and scarcity are issues that have already been discussed by some authors (Walton et al., 2000; Dignum et al., 2001; Homma et al., 2006; Gonzalez-Arnao et al., 2009; Brumano, 2009; 2019; Wilde et al., 2019; Januszewska et al., 2020). Therefore, it is extremely important to encourage the production and processing of native species, in order to supply imports in the future (Brumano, 2019), thus facilitating the population's access to the spice.

Figure 6. Respondents' knowledge and consumption in relation to natural vanilla, expressed as a percentage.



Source: Authors (2021).

Figure 7. Main reasons for not consuming natural vanilla, expressed as a percentage.



Source: Authors (2021).

Natural vanilla consumption was significantly influenced by age, income and region ($p < 0.05$) by cross-tabulating the data. There was no significant effect of sex, education and area of activity ($p > 0.05$) (Table 4).

As can be seen, vanilla consumers have a higher income, with 5.2% of respondents earning more than 12,000 reais, while non-consumers of natural vanilla have mostly (29.4%) income between 1,000 and 3,000 reais and less than 1,000 reais (16.50%). Indicative of the influence of the high prices of vanilla on the acquisition of the same by consumers with lower income. This fact highlights the importance of democratizing the use of vanilla, by encouraging production, which would expand supply and contribute to more affordable prices.

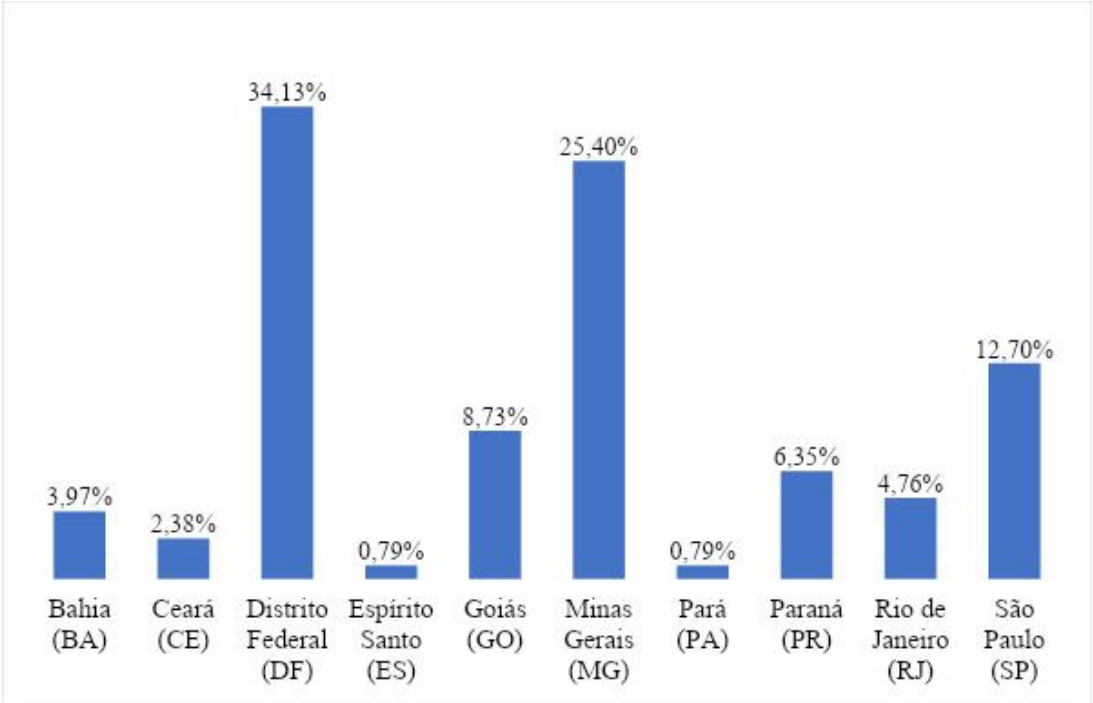
The region is also one of the important factors that also demonstrated a significant effect, so we chose to observe the distribution of vanilla consumers by federation units (Figure 8), in order to visualize the relationship between consumption and the regions in that there is production or that species of vanilla occur.

Table 4. Cross-tabulation between consumption and socioeconomic variables of Brazilian respondents, in percentage. brazilian interviewers in percentage.

		% of participants in relations to the consumption		
Variable	**Classification**	**Yes**	**No**	X^2
Gender	Female	13,8	56,0	0,242^{ns}
	Male	6,5	23,7	
Age	18 to 30 years old	2,1	36,7	59,827*
	31 to 40 years old	5,2	15,4	
	41 to 50 years old	4,9	11,5	
	51 to 60 years old	4,9	10,6	
	61 to 70 years old	3,1	4,4	
	Low	1,8	6,5	0,042^{ns}
Education	High	18,7	73,1	
	Less than R$ 1. 000	1,1	13,1	37,465*
Income	R$ 1.001 a R$ 3.000	3,9	29,4	
	R$ 3.001 a R$ 6.000	4,5	12,5	
	R$ 6.001 a R$ 9.000	1,9	7,0	
	R$ 9.001.a R$ 12.000	3,6	6,3	
	More than 12.000	5,2	11,4	
	Northeast	1,3	10,1	60,254*
Region	Midwest	8,8	10,2	
	Southeast	8,9	53,9	
	South	1,3	4,5	
Activity areas	Related to food	11,0	34,9	0,133^{ns}
	Other areas	9,3	44,8	

*significant at the 5% probability level. ns not significant a High level of education: undergraduate or graduate. Low education: elementary school, high school, vocational school or equivalent (ESPESCHIT, 2014).
Source: Author data.

Figure 8. Distribution of vanilla consumers, expressed as a percentage, by federation units.



Source: Authors (2021).

Natural vanilla consumers are divided between the states of Minas Gerais (25.4%), São Paulo (12.7%), Bahia (3.97%), Pará (0.79%), Distrito Federal (34, 13%), Goiás (9.40%) and Rio de Janeiro (5.13%). These states correspond to regions where production occurs locally, or where extractivism occurs. Because, Brazilian vanilla species occur in different biomes, being associated with those with the highest precipitation, such as Amazon, Atlantic Forest, Cerrado and Caatinga, however, production in the country is insignificant and is not included in official statistics, with some cases of crops in southern Bahia, Minas Gerais, Espírito Santo, São Paulo and Pará (Homma et al., 2006).

In view of the results presented, it is evident that in regions where vanilla occurs in an extractive way, or where there is production, even locally, it allows access to the population, stimulating consumption, and appreciation of natural vanilla.

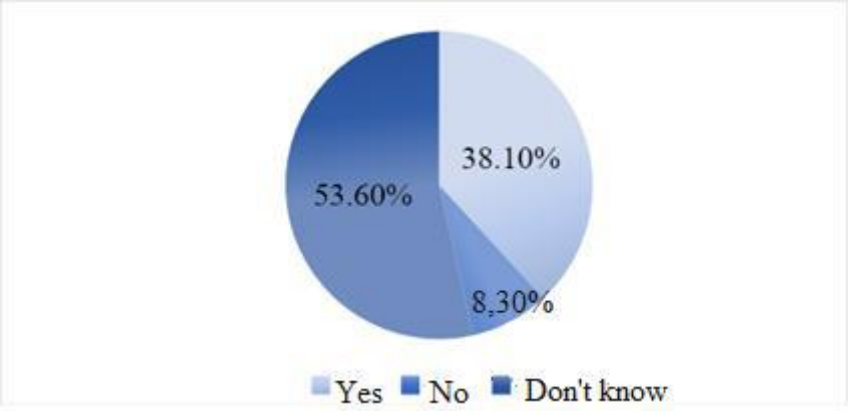
3.3 Knowledge of Brazilians in relation to vanilla production in Brazil

Of the total number of respondents, 61.9% (sum of the answers: no; I don't know) answered that they do not know or that there is no production of vanilla in Brazil (Figure 9). Thus reinforcing the importance of disseminating information about native vanillas. Researcher at Embrapa Genetic Resources and Biotechnology, Roberto Vieira, highlights that the creation of a database with taxonomic, olfactory and chemical information, and evaluation of the productive and market potential, is an important advance for Brazil to meet the market demand. on vanillas (Embrapa, 2018).

Brumano (2019) claims the fact that Brazil is a major importer of vanilla, while the use of native species is limited to the lack of knowledge about them and the low cost of artificial vanilla, as mentioned above. Encouraging production and studies aimed at characterizing native vanillas can contribute to a future replacement of imports, since vanilla is a spice that has highly favorable market prospects, since it is extremely valued in the international market.

In Brazil there are 35 registered species of vanilla, 20 of which are endemic. These occur in different biomes, being associated with the biomes with the highest precipitation, such as Amazon, Atlantic Forest, Cerrado and Caatinga. The Cerrado region of Goiás has been attracting interest due to the presence of the plant in several places. Camilo et al. (2016), studying native species of Brazilian flora, cataloged 11 species, four of which have high-potential olfactory characteristics.

Figure 9. Knowledge in relation to vanilla production in Brazil, expressed as a percentage.

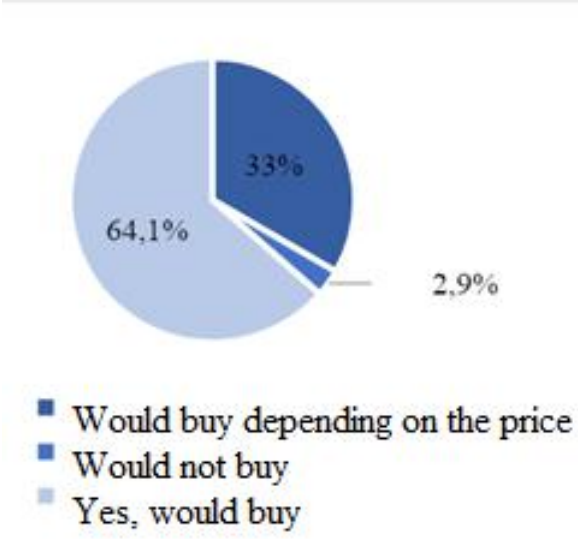


Source: Authors (2021).

Regarding the purchase intention of native vanillas (Figure 10) 64.1% of respondents say they would buy Brazilian vanilla depending on the price, 33% said they would, and only 2.9% reported that they would not buy. The answers obtained show the demand for vanilla in Brazil, since most respondents do not consume natural vanilla, mainly due to the lack of availability, as

shown in Figure 8. Thus, pointing out the importance of encouraging sustainable production accompanied by commercial management (Homa et al., 2006).

Figure 10. Purchase intention of Brazilian vanilla, expressed as a percentage.

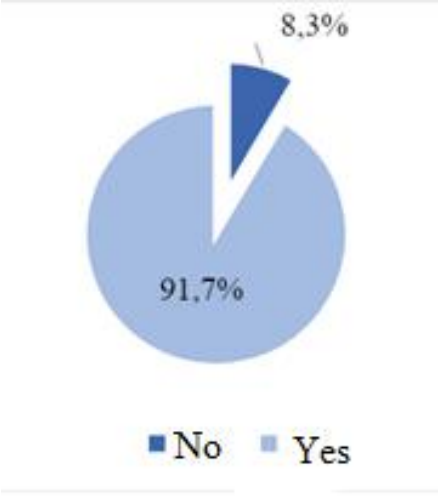


Source: Authors (2021).

3.4 Consumption of products containing vanilla

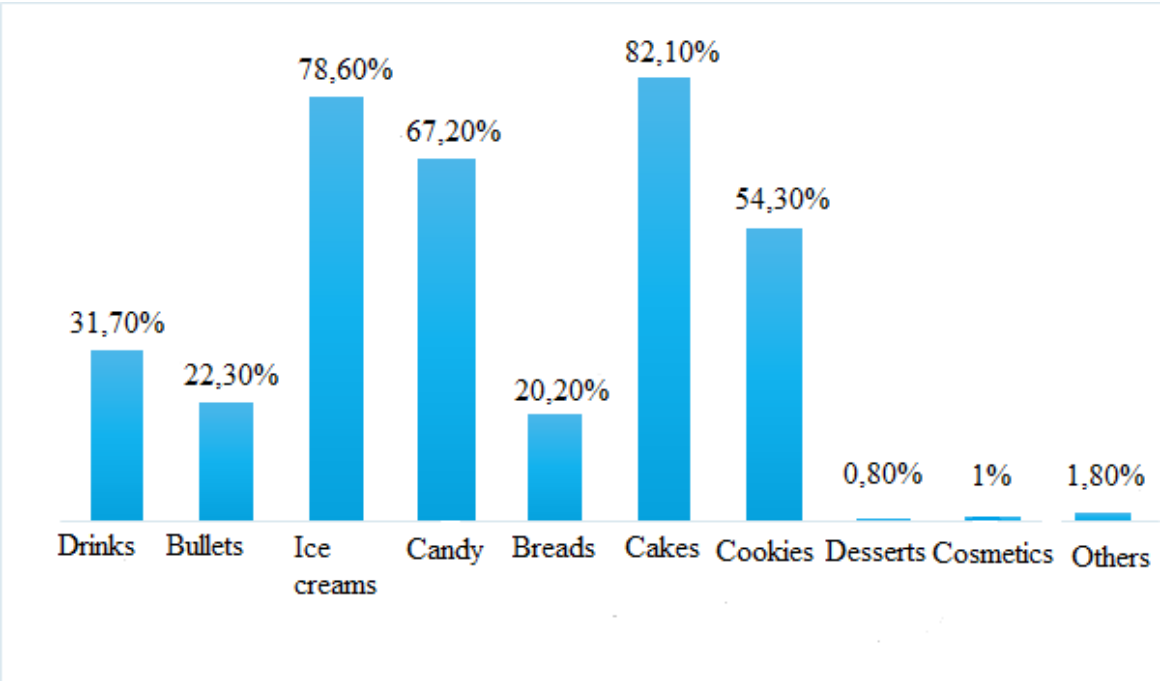
More than 90% of respondents are consumers of products containing vanilla (Figure 11), and the main products consumed are cakes (82.1%), ice cream (78.60%), sweets (67.2%) and cookies (54.3%) (Figure 12). As can be seen, the answers show the importance of the spice for the food industry. According to the literature, more than 90% of vanilla production is destined for food production. Among many species, Vanilla planifolia and Vanilla tahitensis, and Vanilla pompona are the main ones employed to obtain the flavor widely used in the food industry, playing an important role in many sectors of the food industry, improving the sweetness of many products, such as bakery, creams and chocolate, and contributing to the flavor of ice cream preparations (Schipilliti et al., 2017).

Figure 11. Consumption of products containing vanilla, expressed as a percentage.



Source: Authors (2021).

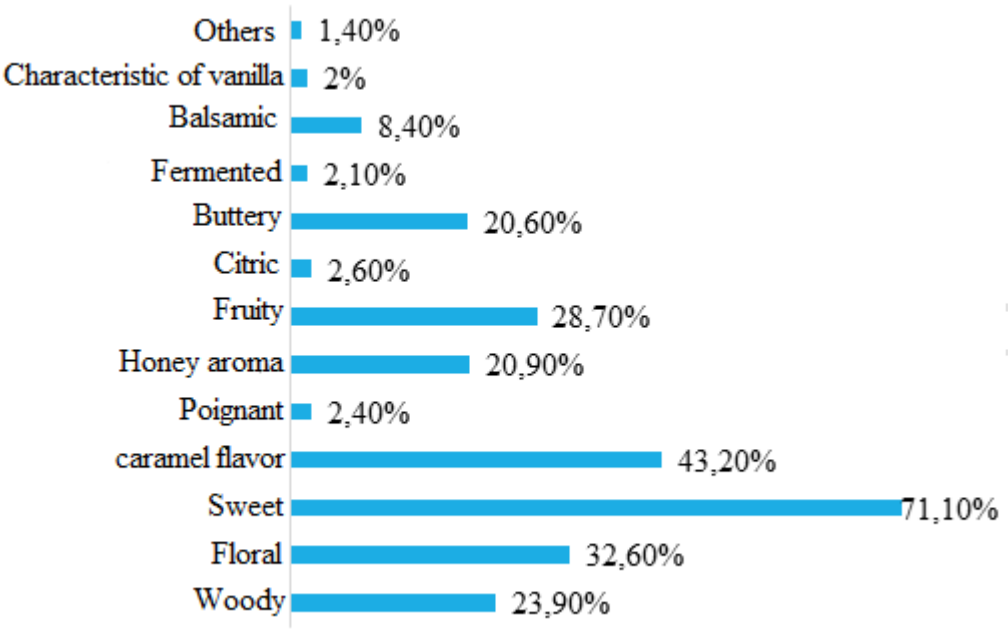
Figure 12. Preference for products with the addition of vanilla, expressed as a percentage.



Source: Authors (2021).

The attributes most cited by respondents to describe the flavor (aroma) of vanilla were sweet (71.1%), caramel flavor (43.20%), floral (32.20%) and fruity (28.7%). A small percentage of respondents (2%) reported that they could not associate the characteristics of vanilla with any of the attributes presented in the list, stating that vanilla has a unique and singular flavor, defining it as "characteristic of vanilla" (Figure 13), an interesting fact. Since vanilla is one of the most popular spices in the world due to its characteristics, its striking and unique flavor is what contributes to its widespread use in the food industry (Wilde et al., 2019). The effect of sweetness, the main attribute cited by respondents, was studied in different sweeteners by Bertelsen et al. (2021), and the sensory analysis showed that the vanilla aroma increased their sweetness intensity, such interference can be explained by the presence of different compounds in the vanilla, which are formed during the pod curing process (Hernández-Fernández et al., 2020).

Figure 13. Percentage of attributes used by respondents to describe the flavor (aroma) of vanilla.



Source: Authors (2021).

The answers obtained in this research session highlight the importance of using vanilla for the food industry, since products with the addition of vanilla are widely consumed, being foods that are part of the diet and daily life of Brazilians. Furthermore, the attributes raised by the respondents characterize the flavor (aroma) of vanilla, with attributes that are desirable by consumers, and that refer to the uniqueness of the sensory characteristics of vanilla.

Therefore, the valorization of native vanillas is a matter of paramount importance, together with evidence of the high potential of Brazilian vanilla species (Camilo, 2016). The incentive to research, making it possible to collect information about native vanillas, together with Marketing as an essential tool, will make it possible to inform consumers about the qualities of natural vanilla, since as demonstrated in this study, many people do not know that the essence does not contain vanilla, and that it is an artificially obtained product. So, taking this information to society would expand knowledge about the characteristics of natural vanilla, influencing its consumption and consequently valuing native vanilla.

4. Conclusion

The results of the first part of the research were in agreement with the information in the literature, which reports that most of what is marketed in the country in relation to vanilla is in its artificial form. Regarding the knowledge and consumption of natural vanilla, most respondents did not know or consume it, influenced by the lack of availability and high prices of the spice. Income and region were associated with the consumption and non-consumption of natural vanilla, since consumers have higher incomes and live in regions where the production or species of vanilla occur, which facilitates access. Most respondents did not know or said that Brazil is not a vanilla producer, but they were willing to buy Brazilian vanilla depending on price. Most of these also consume products that contain vanilla, and have raised sensory attributes that characterize vanilla as a product of sensory quality.

However, the results in this study demonstrate the importance of research aimed at studying, knowing and characterizing Brazilian vanillas, since the lack of information regarding native vanillas is clear among the population. Therefore, disseminating

information about them will contribute to encouraging production, possible replacement of imports and the use of artificial essence. Consequently, the recognition both nationally and internationally of species with high potential in Brazil.

Therefore, it is hoped that through the data obtained in this investigation, further work will be encouraged with the aim of evaluating the characteristics of native vanillas in order to obtain as much information about Brazilian vanilla species as possible.

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