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Geographical Indication: a review

Indicação Geográfica: uma revisão

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ABSTRACT

Geographical Indication (GI) is an industrial property instrument that seeks to distinguish the geographic origin of a certain product or service. The challenge is associated with identifying how the Geographical Indication seal could be a useful tool to leverage local and regional development. The objective of this study is to review the international literature on the topic of Geographical Indication, especially for wine production. The SCOPUS database was used as a search engine. The expression "geographical indication" was used as a search key in the title, keywords or summary fields, resulting in 2224 publications. Publications were analyzed without filter. It was noticed that "Protection" has a negative inclination, that is, it is being left aside as a research interest. The words associated with Wine, Food and Sustainability showed a positive slope in the linear regression, which suggests that they are causing increasing interest among researchers.

Keywords: Sustainability; Protected area

RESUMO

A Indicação Geográfica (IG) é um instrumento de propriedade industrial que busca distinguir a origem geográfica de um determinado produto ou serviço. O desafio está associado à identificação de como o selo de Indicação Geográfica pode ser uma ferramenta útil para alavancar o desenvolvimento local e regional. O objetivo deste estudo é revisar a literatura internacional sobre o tema Indicação Geográfica, especialmente para a produção de vinhos. A base de dados SCOPUS foi utilizada como mecanismo de busca. A expressão "indicação geográfica" foi utilizada como chave de busca nos campos título, palavras-chave ou resumo, resultando em 2224 publicações. As publicações foram analisadas sem filtro. Percebeu-se que "Proteção" tem uma inclinação negativa, ou seja, está sendo deixada de lado como interesse de pesquisa. As palavras associadas a Vinho, Alimentação e Sustentabilidade apresentaram inclinação positiva na regressão linear, o que sugere que estão causando crescente interesse entre os pesquisadores.

Palavras-chave: Sustentabilidade; Área protegida;

INTRODUÇÃO

Geographical Indication (GI) is an industrial property instrument that seeks to distinguish the geographic origin of a certain product or service (INPI, 2024). Brazilian legislation divides Geographical Indication into two modalities or species, defined as follows in its articles (BRASIL, 1996):

> Art. 177 An indication of origin is considered to be the geographical name of a country, city, region or locality within its territory, which has become known as a center for the extraction, production or manufacture of a certain product or the provision of a certain service.
>
> Art. 178 A designation of origin is considered to be the geographical name of a country, city, region or locality within its territory, which designates a product or service whose qualities or characteristics are due exclusively or essentially to the geographical environment, including natural and human factors.

While the Indication of Origin (IP) refers to the recognition of the notoriety of the product/service offered, the Denomination of Origin (DO) aligns with recognition of local specificity that adds unique characteristics to the product/service (Malacarne, Silva, Macedo, De- Bortoli, 2017) Some authors also suggest that recognition seals contribute

to adding value to the product/service (Malacarne, Silva, Vieira, Macedo, Malacarne, Monte, De-Bortoli, 2019), however it is important to differentiate from “increase the value of the product/service”, with a sense of the price to be charged. As a Recognition seal, the Geographical Indication (GI) certifies a specificity that already exists, which makes it easier for its holder to exploit this specificity commercially, as official seals have public faith in veracity.

The challenge among researchers is generally associated with identifying how the Geographical Indication seal could be a useful tool to leverage local and regional development (Malacarne, Nunes-Silva, De-Bortoli, 2019a). It is assumed that this recognition is important, but it is necessary to know more clearly, not only how to obtain the recognition seal, but also how to exploit it, in order to enjoy the benefits arising from it. With the aim of increasing knowledge in the area and reviewing accepted knowledge, the scientific community systematically searches, reviews, and bibliometrics on the topic, such as studies by Malacarne, Nunes-Silva, De-Bortoli (2019b). Quantitative studies contain, to a certain extent, an interpretation bias, according to the interests of the researcher. This does not mean a methodological error, but a focus on current research interests. Typically this type of study is the conceptual basis for deeper experimental or descriptive studies.

Still in the discussion about the benefits resulting from this seal, a study by García, Vera, Tovar, Rivera, (2024), analyzing the Denomination of Origin in Mexican producers, suggests that the greatest benefits are for intermediaries and sales drivers. They purchase products at a low price to sell on the international market at a higher price. The economic benefits resulting from this valuation are sent to other regions, far from the producer.

The variety of nomenclatures and definitions used in different countries also do not help much to standardize understanding. In Brazil, Igs are differentiated into IP and DO. In Argentina, Law 25,966/2004, in its 2nd article, differentiates as follows (Molina, 2020):

> a) Geographical indication: that which identifies a product as originating, from the territory of a country, or from a region or locality of that territory, when certain quality or other characteristics of the product are fundamentally attributable to its

> geographical origin. (Item replaced by article 2 of Law No. 25,966 B.O. 12/21/2004).
>
> b) Denomination of Origin: The name of a region, province, department, district, locality of an area of the national territory duly registered that serves to designate a product originating from them and whose qualities or characteristics are exclusively or essentially distributed in the geographic medium , including natural and human factors.

In European countries, the nomenclature also does not follow the same, even because of the language and its translations or linguistic specificities. This non-unified nomenclature sometimes confuses the understanding and transfer of concepts, also reflecting a threat to the conceptual formation for each language. In this way, literature reviews serve to guide the understanding of phenomena, directing new research and justifying studies regarding their relevance and interest on the part of the scientific community.

Accepted concepts are systematically updated and contemporary interests direct lines of research, highlighting the needs of society and academic interests. The objective of this study is to review the international literature on the topic of Geographical Indication, especially for wine production.

Method

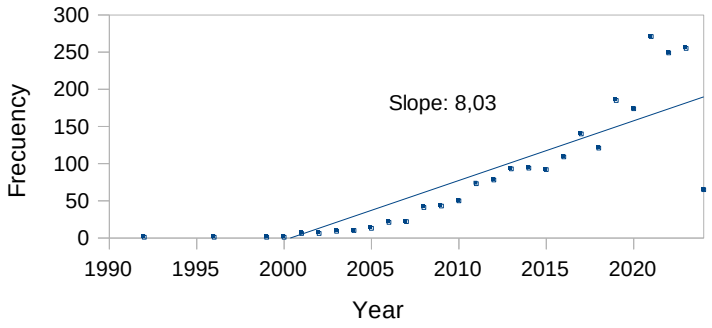
This is a bibliometric study with secondary data analysis. The SCOPUS database was used as a search engine, accessed from the Federated Academic Community (CAFe) system, open to Public Universities. The expression “geographical indication” was used as a search key in the title, keywords or summary fields, resulting in 2224 publications. Publications were analyzed without filter. To generate some understanding, a filter was applied to include only publications with 100 or more citations in the literature, resulting in 16 publications. The objective of this filter is to analyze the temporal arrangement of the most cited publications and identify possible classic works over time.

Data analysis was carried out in order to count the frequency of publications and establish relationships between the type, origin and direction of publications. Finally, a search for keywords was carried out with the intention of identifying the direction and interest of researchers.

Results

After compiling the results of the publications and distributing them over time, it is observed that the beginning of the 2000s was the period that aroused scientific interest in publications. A linear regression was performed and the slope is positive, with an increasing number of researches and a trend towards more publications (figure 1).

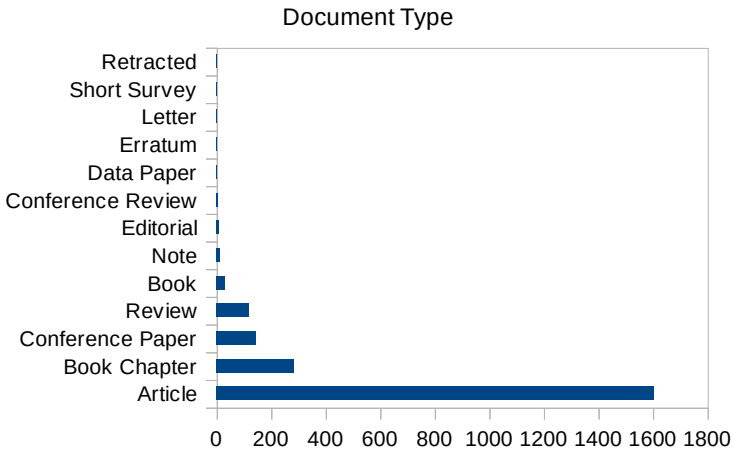
Figure 1 – Frequency of publications with the expression "Geographical Indication"



Fonte: MATOS et al. (2024)

Figure 2 shows the types of documents that resulted from the search. The majority of publications are scientific articles. There are few books and fewer presentations at conferences.

Figure 2 – Type of document

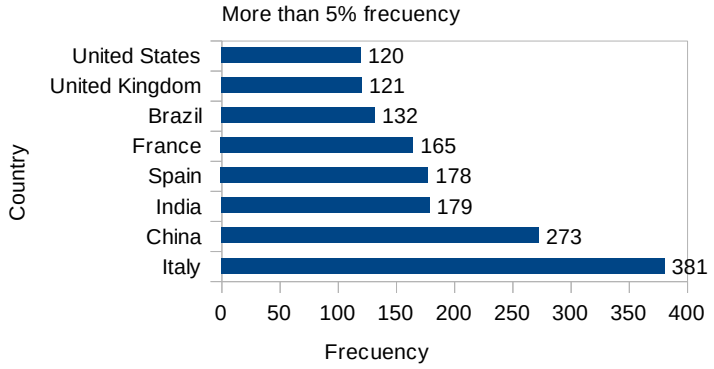


Fonte: MATOS et al. (2024)

Regarding the countries of origin of the studies, those that resulted in more than 5% of publications are shown in figure 3. It is observed that countries with a tradition in

Geographical Indications, such as Italy, Spain and France, are producers of research, but it is interesting to note that China and India are, respectively, second and third countries of origin for publications in the area.

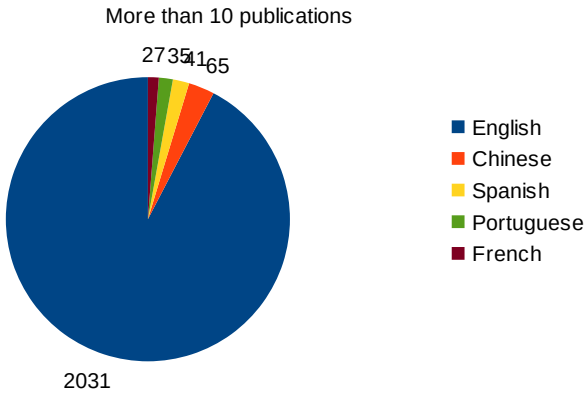
Figure 3 – Country of origin of studies with more than 5% of total publications.



Fonte: MATOS et al. (2024)

Figure 4 shows the language of the publications. It is noteworthy that the language chosen is English, even though the 6 countries of origin of the publications do not use the language. Approximately 89% of publications are in English.

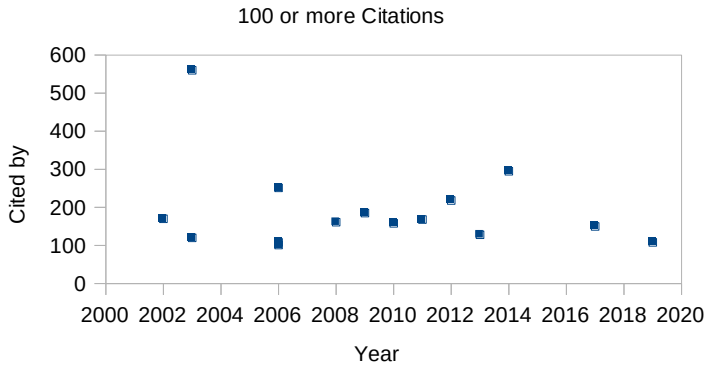
Figure 4 – Language of publications most frequently greater than 10.



After analyzing the origin, a filter was applied to identify classic works on the topic. Figure 5 shows the temporal distribution of publications with more than 100 citations in the literature. The objective was to identify whether there was a relationship

between the number of citations and time spent knowing the work. The results seem to indicate little relationship, that is, there are linear citations of the works.

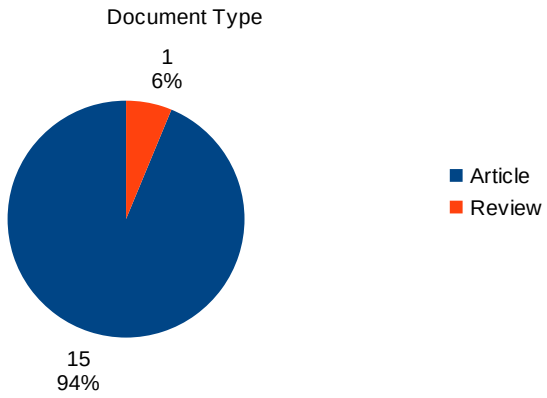
Figure 5 – Year of publications with more than 100 citations.



Fonte: MATOS et al. (2024)

Regarding the type of document among the most cited works, it is clear that of the 16 publications, 95% are articles. It appears that reviews still do not contain relevant information for researchers (figure 6).

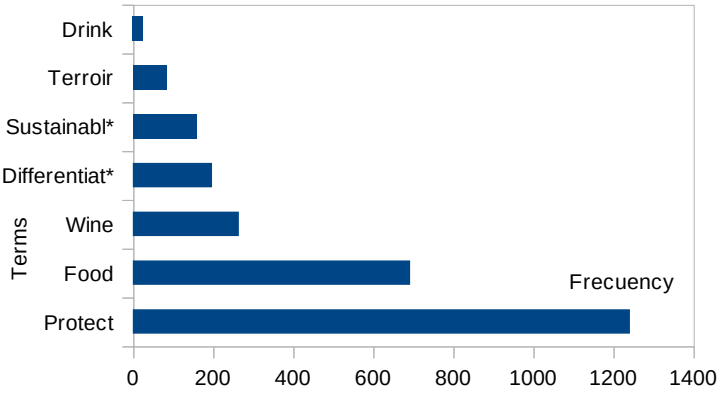
Figure 6 – Type of document with more than 100 citations.



Fonte: MATOS et al. (2024)

Regarding the qualitative analysis of publications, it was not possible to identify a higher frequency of terms among the keywords of the most cited articles. Therefore, an analysis of all abstracts was sought to verify the presence of keywords of interest. Figure 7 shows the frequency of the words “protect” and the low frequency of the words “differentiation” and “sustainability”, searched in English using the radicals and wildcard.

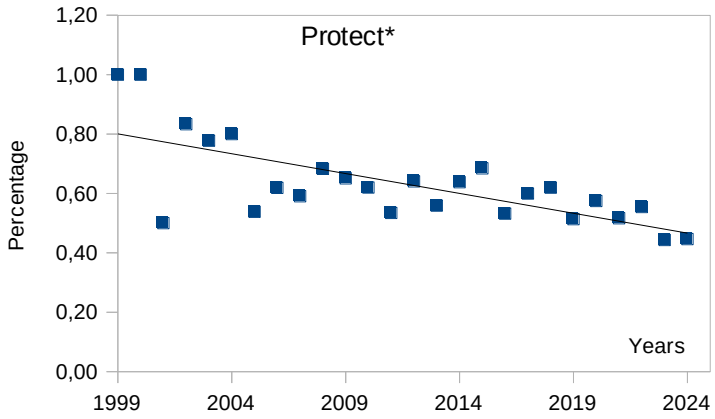
Figure 7 – Frequency of words in summaries of total publications.



Fonte: MATOS et al. (2024)

After checking the absolute frequency of the keywords of interest over the years of publications, they were relativized in relation to the total number of publications for each year. Thus, the frequency percentage per year of publication of the words “Protect* (figure 8), “Sustainabl*” (figure 9), “Wine” (figure 10) and “Food” (figure 11) was calculated.

Figure 8 – Annual ratio of publications with the word Protect*.



Fonte: MATOS et al. (2024)

Figure 9 – Annual ratio of publications with the word Sustainabl*.

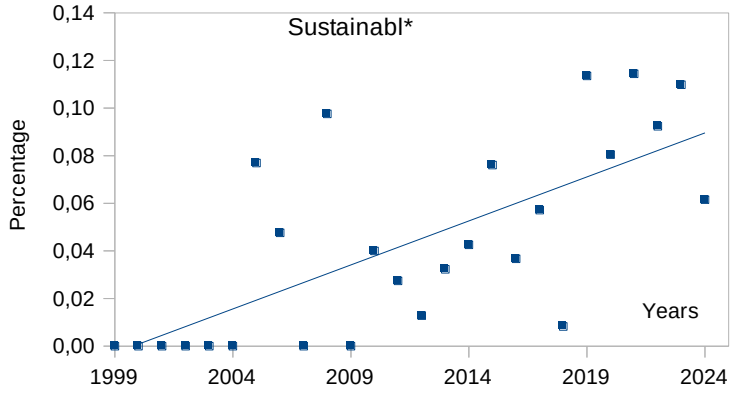
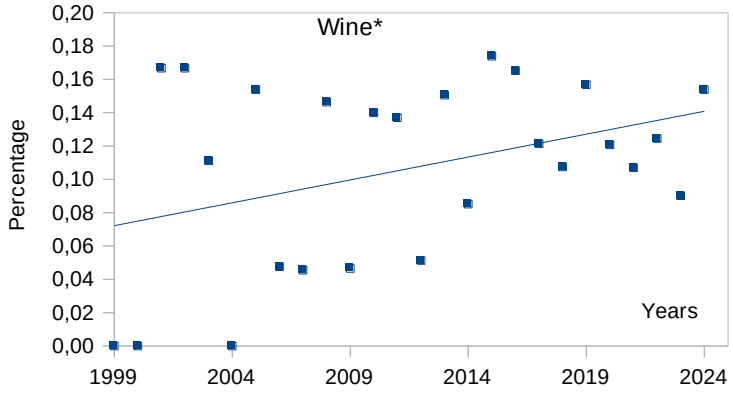
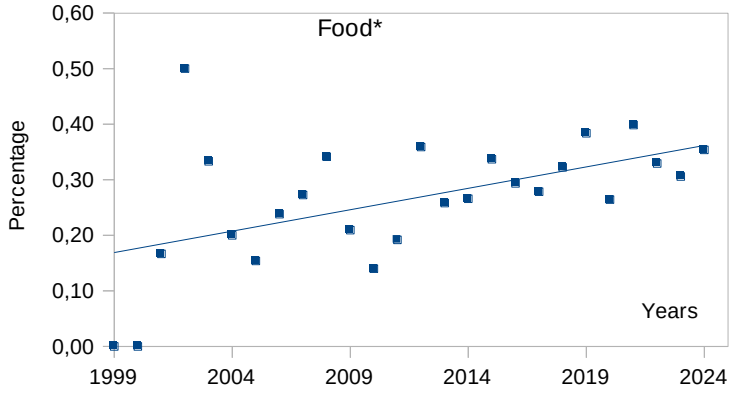


Figure 10 – Annual ratio of publications with the word Wine*.



Fonte: MATOS et al. (2024)

Figure 11 – Annual ratio of publications with the word Food*.



Fonte: MATOS et al. (2024)

Discussion

The first resulting publication with the theme "Geographical Indication" was in 1992 and remains of little interest. In the 2000s, publications in the area increased and their number continued to visibly increase. At a quick glance, it suggests that scientific interest is the driver of this scenario. But this increase in the number of publications may be related to a greater number of journals. To relativize and explain this phenomenon, data from OASPA (2021) demonstrate that the number of published articles has increased 13 times between 2011 and 2020. These data reflect with the same intensity the results of another systematic review until 2018 (Li, Wang, Xiao, & Froyd, 2020).

When analyzing the types of publications, in general, the forms most used by researchers to make their scientific communications are articles, books and conferences or scientific meetings. In general, Books and/or Chapters represent classic data, a way of making knowledge perennial. Books are essentially acquired and handled over time. They are kept in libraries and safeguard knowledge. But few Books and Chapters resulted.

In relation to Scientific Meetings, a place previously intended for meetings and sharing of news, they seem to assume less importance in scientific dissemination. Few publications resulted in Congresses, which means little new or mature research, providing opportunities for more elaborate communications in the form of Articles and/or Books. Angerami & Almeida (1982) explain the risks of this type of scientific report. They say that oral information, such as that which occurs at conferences, seminars, conferences, etc. It can get lost, which should not happen, which is why it is recommended that after the meeting, the work and results are written and published. Perhaps this is the procedure used by researchers on the topic, because fearing that their dissemination will be lost after oral communication, they choose to do so in the form of Articles.

It cannot be ruled out that Scientific Journals are more keen on checking similarity of texts in their analysis of articles for consideration. A communication in Congress withheld its originality from the article. Congresses are becoming easier to organize every day, as are creating Scientific Journals, so it must be considered that there may be a relationship in this movement.

Articles were the form of publications resulting in the largest quantity. Perhaps because they adapt to modernity, as results are always sought to reach the reader and articles are increasingly available on search engines, competing with oral communications at Congresses. Conceição & Chagas (2020) explain by saying that the Cyberculture context constitutes fertile soil for dissemination as it is a connected culture,

marked by mobility and liberation of the various authorship processes. Furthermore, having multiple means and forms of communication is an attribute that favors the researcher's creativity and inventiveness. It would be a good explanation why the resulting publications were basically articles in Scientific Journals.

Among the countries with the largest number of publications are countries with a history of Geographical Indications, but what stands out is that China and India are the second and third countries of origin for publications. This reality was not initially expected, as European countries have a greater tradition of protection. In Italy, considering only wines, there are 410 Protected Designation of Origin (PDO) and 119 Protected Geographical Indication (PGI), totaling 529 protections. (Misaf, 2024).

Regardless of the tradition of protecting with a Geographical Indication seal, this situation demonstrates the interest of these countries in the topic. It could also be explained by there being more researchers in these countries, but making this relationship is not the objective of this study and can be verified in new studies. The language of publication is English, confirming the various studies such as (Silva & Razzolini Filho, 2021) but it is also noteworthy that the second most published language is Chinese.

When analyzing the works with the largest number of publications, it is clear that they are distributed chronologically. There seems to be no relationship between longer publication time and more citations. When a study begins to arouse interest among researchers, it is normal for the first works to become references for the others. They become classics in terms of content alone and are cited repeatedly as they form the conceptual basis used. Thus, it is common for some old works to become references, positive or negative, to support future studies, but this was not the case, as the distribution of the most cited works was linear in chronological analysis.

Once the most cited articles were gathered, we sought to identify the most frequent keywords. Among the keywords of the most cited works, a pattern of words that referred to the specific search was not found. Then, words of interest were listed, related to concepts of Geographical Indication such as Protection, Sustainability, Differentiation, Wine, Food, Terroir and Drink and searched in the total of works in the summaries resulting from the research.

The words “Protection” or related words seem to be the most frequent word. The other words (or word roots) of interest were not as present. Authors such as Belletti, Marescotti & Touzard (2017) explain that the exploration of protection by Geographical Indication is explored as a support tool to guarantee sustainable development, but this is

not reflected in the key words present in the abstracts. Therefore, this statement raises doubts and calls into question the methodology for analyzing the collected data. At this point, it was decided to insert new analysis criteria to understand their own limitations.

Once the key words in the abstracts were identified, they were distributed chronologically and a linear regression was performed to identify the slope of the trend. After analyzing the words over time and their frequency in the abstracts, it was noticed that “Protection” has a negative inclination, that is, it is being left aside as a research interest. The words associated with Wine, Food and Sustainability showed a positive slope in the linear regression, which suggests that they are causing increasing interest among researchers.

The differentiation of products means an alternative for their appreciation and recognition (Deselnicu, Costanigro, Souza-Monteiro, & McFadden, 2013), and this seems to be of growing interest among researchers, when analyzing the data with the new criteria. A study by Skuras & Vakrou (2002) supports this interpretation when they state that consumers of low-quality wine are willing to pay twice the price of a bottle of normal table wine if the alternative provides a guarantee of the wine's place of origin.

On the other hand, preserving terroir also has a tangible effect on the product itself. By valuing and protecting terroir, GI supply chains provide an alternative to homogenized and standardized flavors and celebrate the diversity and unique flavors of foods and beverages (Bowen, & Zapata, 2009).

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