Intellectual Property: Overview Of Geographical Indications For Wine And Sparkling Wines

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Abstract:

This study addresses the current panorama of research related to Geographical Indications (GIs) of wines and sparkling wines. The main objective is to provide an overview of publications that address geographical indications in this context. To achieve this objective, quantitative methodologies were used, following the three laws of bibliometrics, and qualitative, including a systematic review. The bibliographic survey highlights that GIs are a subcategory of industrial property, which in turn falls within the broader scope of Intellectual Property. The results reveal a continuous increase in the number of publications, especially in recent years. Furthermore, these results demonstrate consonance with the three laws of bibliometrics, reinforcing the validity of the approach adopted.

Key Word: Geographical Indications. Wines. Sparkling Wines.

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I. Introduction

This study addresses the situational panorama of studies related to Geographical Indications (GIs) applied to wines and sparkling wines. GIs are considered as tools for the development and valorization of natural and territorial resources in the regions that obtain this recognition (Vieira; Zilli; Bruch, 2016).

GIs can manifest themselves in two ways: Denomination of Origin (DO) and Indication of Origin (IP) (Brasil, 1996). IP is associated with geographic names of countries, cities, regions, or locations within their territories that have become known as centers of extraction, production or manufacturing of a specific product or provision of a specific service. DO is also related to geographic names, but its qualities or characteristics derive exclusively or essentially from the geographic environment, including natural and human factors.

Studies on GIs have experienced notable growth in recent years. Given this scenario, it is essential to offer an adequate answer to the question of understanding the current situation of research on GIs, as well as investigating its evolution over time. Therefore, this study aims to provide an overview of publications that address geographical indications applied to wines and sparkling wines. To achieve this objective, we employed a quantitative methodological approach, aligned with the three laws of bibliometrics, and a qualitative analysis through a systematic review (Higgins; Green, 2006; Moher et al., 2009). Data was collected from the Scopus database in September 2022.

This study is composed, in addition to this introduction, of the theoretical framework, methodology, final considerations and references used.

II. Methodological procedures

This is research with a basic purpose, quantitative in nature and approach (Creswell, 2007; Günther, 2006). Regarding the objectives, the research is characterized as exploratory (Lakatos; Marconi, 2019), with technical bibliographic survey procedures (Gil, 2018) and a bibliometric analysis. The data collection was carried out in September 2022 on the Scopus databases. The search criteria adopted use indexers and filters in each of the bases (Table 1).

Quantitative bibliometric analysis offers tools capable of identifying the main publications in each period and specific areas, as well as analyzing them regarding their degree of relevance, based on the number of citations (Broadus, 1987; Pilkington; Meredith, 2009). Bibliometrics was conducted considering the three laws. The first

law, known as Lotka's Law (1926), concerns authors, and proposes that a restricted number of researchers produce a lot in each area of knowledge, while many researchers produce little.

Table 1: Criteria for Scopus searches

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Indexers	Rounding operator	Indexers	Filters
"geographical indications" OR "geographical indication" OR "denomination of origin" OR "indication of origin"	AND	wine OR sparkling	articles book chapters books conference document revision

Source: prepared by the author (2022)

A segunda lei, conhecida como Lei de Bradford (1934), relaciona-se aos periódicos e estabelece que poucos periódicos produzem muitos artigos, enquanto muitos periódicos produzem poucos artigos. A terceira lei, proposta por Zipf (1946), mede a frequência das palavras e analisa que um pequeno número de palavras é usado com muito mais frequência (Machado Junior et al., 2016).

III. Theoretical Reference

Geographical Indications (GIs) is a comprehensive concept that encompasses several legal mechanisms used to protect geographic indicatives, which provide consumers with information about both the geographic origin of a product and its quality and characteristics (Hughes, 2014). GIs identify products that have a specific quality linked to their geographic origin.

Geographical indications are protected by sui generis legislation or government decrees in some countries, while in others they are covered by the trademark system. Countries adopt different approaches and definitions for registering GIs, occasionally using combinations of two or more approaches (EMBRAPA, 2022). These strategies are developed according to their specific legal traditions, historical contexts, and economic conditions.

Geographical Indication (GI) is a special type of product protection, inserted within the scope of Intellectual Property (IP) and supported by several international conventions (Valente et al., 2012). Within the context of IP, GIs refer to the use of denominations originating from specific geographic locations and represent an exclusive right of producers located in that area (Biénabe; Marie-Vivien, 2017; Lubinga et al., 2021).

Wine is an alcoholic drink exclusively produced from grapes. According to Brazilian legislation, wine is the result of the alcoholic fermentation of healthy, fresh, and ripe grape must. The alcohol content varies depending on the categories of wine (table, sparkling, fortified, and composed) and the types of wine (red, rosé, and white) (Brasil, 2018). Each country or region has its own regulations for each variety of wine. In recent decades, wine GIs (such as designation of origin, indication of origin or equivalent) have been used as a seal of trust when choosing wines, especially in Europe, where this process has been consolidated for longer (Camfield et al., 2018).

The International Organization of Vine and Wine (OIV) is an intergovernmental organization of a scientific and technical nature, established in 1924 as the International Wine Office, with the purpose of harmonizing the situation world wine industry. Currently, the OIV is made up of 48 Member States, which account for 87% of global wine production and more than 71% of global consumption (OIV, 2021). On August 4, 2021, the OIV updated the definitions of Geographical Indication and Denomination of Origin, aligning them with the international definitions of the World Intellectual Property Organization (WIPO) and the World Trade Organization (WTO), as follows:

Geographical Indication is any designation protected by the competent authorities of the country of origin, which identifies a wine or spirit drink as originating in a specific geographical area, in which a certain quality, reputation or other characteristic of the wine or spirit drink is essentially attributable to its geographic origin.

Denomination of Origin is a name recognized and protected by the competent authorities of the country of origin, which consists of or contains the name of a geographical area, or another name known to refer to that area, which serves to designate a wine or spirit drink as originating from that area. geographic area area, where the quality or characteristics of the wine or spirit drink are due exclusively or essentially to the geographic environment, including natural and human factors, and which gave the wine or spirit drink its notoriety. (OIV, 2021)

The National Institute of Industrial Property (INPI), through Normative Instruction No. 095/2018, dated December 28, 2018, defined the conditions for the registration of Geographical Indications (GIs) in two modalities: the Indication of Origin and the Denomination of Origin (INPI, 2018; Brasil, 2018). In Brazil, the INPI is responsible for analyzing, monitoring processes, and granting registration of Geographical Indications.

IV. Results and discussions

The first search, without filters, resulted in 394 results. After applying the filters, 389 publications remained in the period between 1995 and 2022, which were the subject of analysis. An increasing curve is observed in the time series, resembling an exponential growth trend line, with small fluctuations in some years (Figure 1).

Figure 1: Time series 60 Publications 40 20 1990 1995 2000 2005 2010 2015 2020 2025 Year

Source: survey data (2022)

The bibliometric analysis according to the first law of Lokta (1926), which refers to the authors, reveals a conformity of the results with this law. Of the 160 researchers, 140 published only 3 or less research, while one researcher stands out with 8 publications, another four with 6 publications each, four more with 5 publications each and eleven with 4 publications each. This shows that few authors have a greater volume of publications, while the majority publish fewer (Figures 2).

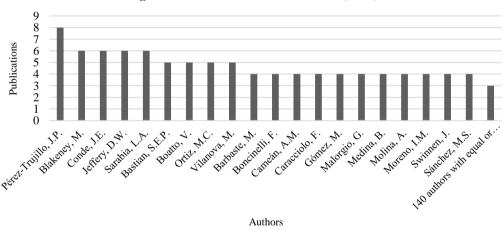


Figure 2: Publications under Lokta Act (1926)

Source: survey data (2022)

Additionally, almost two thirds of the authors, that is, 105, presented only 2 published studies each (Figure 3).

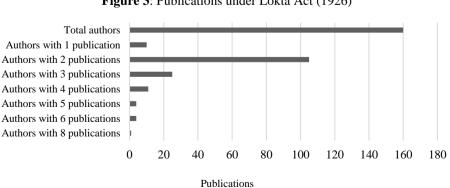


Figure 3: Publications under Lokta Act (1926)

Source: survey data (2022)

In the context of the law that investigates the frequency of periodicals or magazines, known as Bradford's law (1934), analysis of the results reveals that, of the 150 periodicals, 127 published 3 or fewer works. Four journals stand out: "Food Chemistry" (with 14 publications), "British Food Journal" (with 12 publications), "Journal of Wine Research" (with 11 publications) and "Foods" (with 10 publications) (Figure 4).

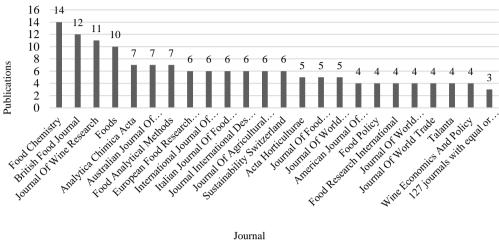


Figure 4: Publications under the Bradford Act (1934)

Source: survey data (2022)

It is important to highlight that more than two thirds of the journals published only one work (Figure 5). These numbers show that the results are in line with the second law of bibliometrics, that is, few journals publish more frequently, while many publish more limitedly.

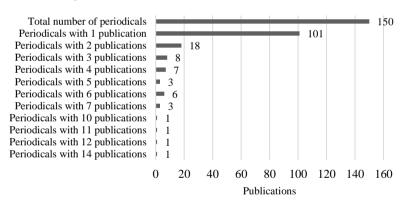


Figure 5: Publications under the Bradford Act (1934)

Source: survey data (2022)

As in the two previous bibliometric analyses, Zipf's law (1946) was also applied, which relates the frequency of words. For this analysis, the study in question considered the study areas of each publication as words, ranging from a single word to sets of words.

Therefore, words related to agricultural and biological sciences were the most frequent, with 35% (201 mentions out of a total of 579). Next come social sciences, with 21%, followed by management, business, accounting, and chemistry, with 11%, and economics, econometrics, and finance, with 10%. The other words had similar frequencies (Figure 6).

computer Science, 2%_ Others, 7% Agricultural and Biological Sciences, Energy, 2% 35% Arts and Humanities, 2% Earth and Planetary Sciences, 3% Immunology and Microbiology, 4% Engineering, 6% Biochemistry, Genetics and Molecular Biology, 6% Environmental science,. Social Sciences, 21% Economics, Econometrics and Finance, 10% Business, Management and Accounting, 11% Chemical, 11%

Figure 6: Publications according to Zipf's law (1946)

Source: survey data (2022)

In addition to the three laws of bibliometrics, an analysis was also carried out of the institutions affiliated with the finds, highlighting the Universidad de la Laguna (with 15 finds), the Università degli Studi di Padova (with 12), the Universidad de Castilla-La Mancha (with 11), the Universidad de Burgos and the Universidad de Sevilla (with 10 each), totaling 161 institutions (Figure 7).

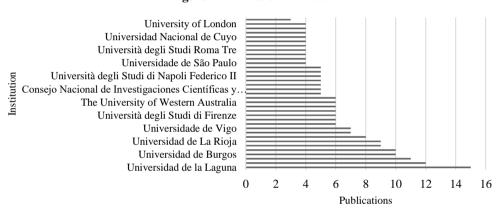
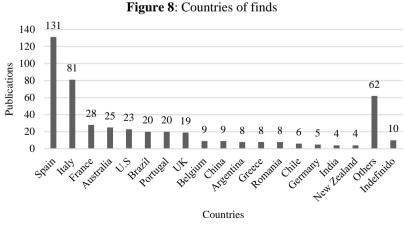


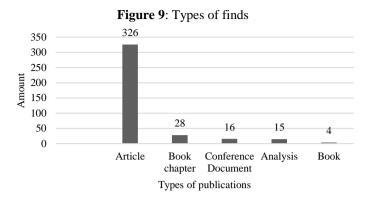
Figure 7: Affiliation of finds

Source: survey data (2022)

These institutions are in different countries and continents. Among a total of 49 countries, Spain stands out with 131 publications, followed by Italy with 81, France with 28, Australia with 25, the United States with 23, Brazil and Portugal with 20, and the United Kingdom with 19. Of the total, 21 countries had three or fewer publications (Figure 8).



Source: survey data (2022)



Source: survey data (2022)

Due to the methodological criteria applied (according to Table 1), the results consist of five distinct categories. Of the 389 total publications, 83.8% correspond to scientific articles, 7.2% to book chapters, 4.1% to conference documents, 3.9% to analyzes and 1% to books (Figure 9).

V. Final considerations

The study set out to outline a comprehensive overview of research on geographical indications of wines and sparkling wines, which was possible to do using bibliometrics. The results revealed a total of 389 publications covering the period from 1995 to 2022, demonstrating a growth trend over time, with emphasis on the year 2019 as the period with the highest volume of publications.

The results obtained are in line with the three fundamental laws of bibliometrics. Lokta's first law (1926) is confirmed, revealing that few authors stand out with a greater number of publications, while many have more limited contributions. This is also reflected in the analysis of journals, in accordance with Bradford's law (1934), where few journals concentrate a significant number of articles, while many have a more restricted participation.

Furthermore, the analysis of the most frequent words or sets of words, according to Zipf's law (1946), highlights the prevalence of terms linked to agricultural and biological sciences. It is observed that many studies are associated with European institutions, with Spain being the leading country with 131 publications, representing a third of the total of 389 publications in 49 countries. Brazil is in sixth position, with 20 publications. Regarding the type of publication, scientific articles predominate, contributing 83.8% of the findings.

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