



Organic agriculture: Historical, normative and economic aspects

Agricultura orgânica: aspectos históricos, normativos e econômicos

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ABSTRACT

Organic agriculture is of great importance for Brazil and the world, for maintaining the original quality of food. The production and consumption of organic food have been occupying more and more space in the world's agri-food systems. The objective of this work was to geographically study the production of organic food in the world and in Brazil. Studying the historical, normative and economic aspects for organic production, its trend and importance from a descriptive review of the theme. The present study is based on a systematic literature review, conducted in October and November 2022. The work was developed based on research in public and open databases: SciELO; Google Scholar and Digital Library of Periodics. In order to corroborate the study, we also used: Federal decrees, technical standards and normative instructions. The following phrases were used in the searches: Organic Agriculture; Historical Aspects; Regulatory and Economic. Initially, 43 papers were pre-selected and, after evaluation, 17 articles were used in this review. The final considerations show that: Organic agriculture is a great alternative for small, medium and large producers, as the market has been expanding and diversifying its products every year. The number of consumers of organic products is only increasing. About 2 to 10 percent per year, in Brazil and worldwide, respectively. As a result, there may be an increase in productive areas and, consequently, new farmers will possibly start producing.

RESUMO

A agricultura orgânica é de grande importância para o Brasil e o mundo, por manter a qualidade original dos alimentos. A produção e o consumo de alimentos orgânicos têm ocupado cada vez mais espaço nos sistemas agroalimentares mundiais. O objetivo deste trabalho foi estudar geograficamente a produção de alimentos orgânicos no mundo e no Brasil. Estudando os aspectos históricos, normativos e econômicos para a produção orgânica, sua tendência e importância a partir de uma revisão descritiva do tema. O presente estudo é baseado em uma revisão sistemática de literatura, realizada em outubro e novembro de 2022. O trabalho foi desenvolvido a partir de pesquisas nas bases de dados públicas e abertas: SciELO; Google Acadêmico e Biblioteca Digital de Periódicos. A fim de corroborar com o estudo, utilizou-se também: decretos federais, normas técnicas e instruções normativas. As seguintes frases foram utilizadas nas buscas: Agricultura Orgânica; Aspectos Históricos; Normativos e Econômicos. Inicialmente foram pré-selecionados 43 trabalhos e após avaliação, 17 artigos foram utilizados nesta revisão. As considerações finais mostram que: a agricultura orgânica é uma ótima alternativa para pequenos, médios e grandes produtores, pois o mercado vem se expandindo e diversificando seus produtos a cada ano. O número de consumidores de produtos orgânicos só aumenta. Cerca de 2 a 10 por cento ao ano, no Brasil e no mundo, respectivamente. Com isso, poderá haver aumento de áreas produtivas e, conseqüentemente, novos agricultores possivelmente começarão a produzir.

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Introduction

The production and consumption of organic food have been occupying more and more space in the world's agri-food systems. "This expansion is taking place at the international level, but the pace of dissemination of this process is considerably uneven. However, it was observed that in the period between 2000 and 2017, the world's arable area destined to organic crops increased by 365%, almost 10%/year" (SILVA, *et al.*, 2022, p. 1).

According to Law No. 10.831, of December 23th, 2003: Art. 1, "An organic system of agricultural production is considered to be any system in which specific techniques are adopted, through the optimization of the use of available natural and socioeconomic resources and respect for the cultural integrity of rural communities, with the objective of economic and ecological sustainability, the maximization of social benefits, the minimization of dependence on non-renewable energy, employing, whenever possible, cultural, biological and mechanical methods, as opposed to the use of synthetic materials, the elimination of the use of genetically modified organisms and ionizing radiation, at any stage of the production, processing, storage, distribution and commercialization process, and environmental protection" (BRASIL, 2003, p. 1).

In the period from 2000 to 2017, "organic agriculture jumped from 15 million hectares of land to 69.8 million hectares. Where, 51% of the agricultural area is in Oceania, Europe (21%), Latin America (11%), Asia (9%), North America (5%) and Africa (3%)" (SILVA, *et al.*, 2022, p. 1).

According to Farias *et al.* (2022, p. 1), "in Brazil, the production and consumption of organic products have increased. However, at a slower pace compared to developed countries, this growth was driven by the domestic market and also the foreign market".

During the last decades agriculture has changed its character through the development of new technologies, agricultural machinery and the chemical industry. At the same time, farmers, concerned about ecology and the environment, have developed farming methods and processes that they say are safe and sustainable. This production system is based on the dynamic interaction between soil, plants, animals, people, ecosystem, and environment (IFOAM, 1998, p. 1).

Through the data obtained by Lima *et al.* (2020, p. 29), "organic food production in Brazil exceeded 1.13 million hectares in 2017 with more than 15 thousand producers. In 2000, the area with organic production was 803 thousand hectares, that is, an average annual increase of 2%".

"Agroecology is a proposal for structural change in the socio-cultural, environmental, and political-economic relationship through science, practice, and movement. As a multidisciplinary, practical scientific approach or social movement that advocates the redesign of agroecosystems". There are those who find a similarity between organic agriculture and agroecological farming, but there are differences between them. "Although agroecology and organic

agriculture are distinct concepts, organic food production promotes technologies designed by the agroecological approach, and represents forms of production oriented towards Sustainability” (ROVER, *et al.*, 2021, p. 380).

Thus, it is understood that products from organic systems do not accept the use of transgenic varieties, synthetic fertilizers, agrochemicals and ionizing radiation.

“After the institutionalization, organic products gained prominence worldwide, there was a growth in consumers' interest in knowing the origin of food, its production and distribution, in the expectation of greater security regarding food quality” (ROVER *et al.*, 2021, p. 379).

“Agroecology and organic production are presented as alternatives for the production of healthy food. The two production systems still face challenges to be adopted by family farmers/peasants, promoting sustainability in the rural and urban spaces in which we operate” (BATISTA *et al.* 2022, p. 43).

The objective of this work was to geographically study the production of organic food in the world and in Brazil. Studying the historical, normative and economic aspects for organic production, its trend and importance from a descriptive review of the theme.

Historical Aspects of Organic Food Production.

For Ormond *et al.* (2002, p. 5), organic food production is a set of agricultural production processes that are based on the basic assumption that fertility is a direct function of the organic matter contained in the soil. The actions of microorganisms present in the existing biodegradable compounds or placed in the soil enable the supply of mineral and chemical elements necessary for the development of cultivated vegetables. In addition, the existence of an abundant microbial fauna reduces the imbalances resulting from human intervention in nature. Enabling proper nutrition and a healthy environment results in plants that are more vigorous and more resistant to pests and also resistant to diseases.

On a trip to India in the 1920s, the English researcher Sir Albert Howard observed agricultural practices through organic composting and fertilization used by peasants, later reporting them in his book “An Agricultural Testament” (*Um Testamento Agrícola*), from 1940 (PENTEADO, 2001, p. 10).

According to a study conducted by Vogt (2007, p. 9-10), the origin of organic agriculture should be considered from four events that occurred from the end of the nineteenth century to the beginning of the twentieth century, namely: the agricultural crisis between the First and Second World Wars; the scientific discoveries of mycorrhizal fungi and nitrogen-fixing bacteria; the social movements that disapproved of industrialization, urbanization, and the growing dominance of technology in the world; and inspiration from the agricultural practices of the Far East.

According to Santos *et al.* (2012, p. 36), “organic agriculture is an activity practiced and registered in more than 150 countries. [...], driven mainly by environmental problems and food contamination caused by conventional or industrial agriculture of products from organic agriculture”.

Organic agriculture has as principles and practices to encourage and enhance biological cycles within the agriculture system to maintain and increase soil fertility, minimize all forms of pollution, avoid the use of synthetic fertilizers and pesticides, maintain the genetic diversity of the production system, consider the broad social and ecological impact of the food production system, and to produce good quality food in sufficient quantity (SANTOS *et al.*, 2004, p. 81).

According to Penteadó (2001, p. 9-13), “several movements or processes that adopt these basic principles (agroecological) are part of organic agriculture, which are: Biological, organic, natural, biodynamic, yamaguishiana, permaculture, agroforestry, etc.” These agroecological production processes that the author refers to are described as follows:

Organic Agriculture - The Englishman Sir Albert Howard, who started it in 1920, is one of the most widespread currents of the organic movement. His research lasted approximately 40 years, seeking to demonstrate the relationship between human health and resistance to diseases and the organic structure of the soil, publishing relevant works between 1935 and 1940 and, for this reason, he is considered the founder of organic agriculture [...]. His studies were disseminated, reinforcing the importance of soil biological processes, as well as the relationship between soil, plant, animal and human health.

Biodynamic Agriculture - Developed by the Austrian philosopher Rudolf Steiner, was delivered to farmers in Germany in 1924 where he presented an alternative view of agriculture based on the spiritual science of anthroposophy [...]. Biodynamic agriculture has a common basis with other forms of organic production with regard to the diversification and integration of plant, animal and forestry farms; it adopts recycling schemes for plant and animal waste, via composting, and the use of nutrients of low solubility and concentration.

Organic Agriculture - Developed in the early 1930s by biologist and politician Dr. Hans Müller, he worked in Switzerland on studies on soil fertility and microbiology, giving birth to organo-organic agriculture, later known as organic agriculture, whose initial objectives were basically socioeconomic and political, that is, they sought the autonomy of the farmer and direct commercialization. Around the 1960s, when the Austrian physician Hans Peter Rusch spread this method.

Natural Agriculture - In the mid-1930s, the Japanese philosopher Mokiti Okada founded a religion based on the principle of purification, today the Messianic Church, which had as one of its foundations the so-called natural agriculture. The principle of Natural Agriculture is that agricultural activities should enhance natural processes, avoiding energy losses in the system. [...] the agricultural system as close as possible to natural systems.

Permaculture - Emerged in Australia, using the ideas of natural agriculture, were worked on by Dr. Bill Mollison and gave rise to a new method known as permaculture which means an integrated evolutionary system of perennial plant

and animal species (where the name comes from) or self-perpetuating useful to man.

Other organic-based production systems have been described as follows:

Alternative agriculture emerged in the second decade of the 20th century with the ideas of Steiner, through biodynamic agriculture, and by Howard, who developed research in organic agriculture, but its greatest repercussion was in the 1960s, it appeared as a protest movement, as well as many others that emerged in the same period (SILVA, 2004, p. 15).

The so-called Agroforestry System is characterized as a science that has been developed since the 1970s, when the main hypotheses of the role of trees on tropical soils were developed, and mainly with the creation of international institutions focused on agroforestry research, such as the International Council for Research in Agroforestry (*Centro Internacional de Pesquisa Agroflorestal - ICRAF*). It is based on forestry, agriculture, animal husbandry, soil management and other disciplines related to land use (ENGEL, 1999, p. 3).

It can be observed that in Brazil there are several ways of producing food that do not use agrochemicals. Nowadays, production is based on empirical knowledge, which has been passed down from generation to generation. According to Santos *et al.* (2012) “in Brazil, the organic cultivation system, on a technological basis, began on a small scale at the end of the 1970s”. However, after the creation of the Biodynamic Institute for Rural Development (IBD) in 1990, such activity began to expand.

Among the various organic production chains, which meets the technical regulations in force in each country, for the production and consequently the commercialization of organic products. With well-founded principles and particularities, they are presented in table 1, with prominence in the different currents of organic agriculture. Through sustainable production from management, through environmental protection in time and space, respecting the biological diversity of the soil and respecting the culture of the producers.

Table 1.

Basic and particular principles of the main movements that gave rise to organic methods of production.

MOVEMENT OR CHAINS	BASIC PRINCIPLES	PARTICULARITIES
BIODYNAMIC AGRICULTURE	It is defended as a spiritual science, linked to anthroposophy in which property must be understood as an organism. Practices that allow interaction between animals and plants are advocated; respect for the biodynamic astrological calendar, which aim to reactivate the vital forces of nature; conservation of the environment.	In practice, what most differentiates biodynamic agriculture from other organic currents is the use of some biodynamic preparations (highly diluted liquid compounds, made from mineral, plant and animal substances) applied to the soil, plant and compost, based on an energetic perspective and in accordance with the disposition of the stars.

ORGANIC AGRICULTURE

It has no religious affiliation. In the beginning, the model was based on socioeconomic aspects, producer autonomy and direct commercialization. The concern was environmental protection, biological quality of food and the development of renewable sources of energy. The principles of organic agriculture are based on plant health, which is linked to soil health. In other words, a well-nourished plant, in addition to being more resistant to diseases and pests, provides man with food of greater biological value.

It does not consider the association of agriculture with livestock to be essential. It recommends the use of organic matter. However, this can come from other sources external to the property, contrary to what the biodynamicists recommend. According to its precursors, the most important thing was the integration between the properties and with the set of regional socioeconomic activities. This term is mostly used in European countries of Latin origin (France, Italy, Portugal and Spain). According to the standards, a biodynamic or organic property is also considered to be biological.

NATURAL AGRICULTURE

The model presents a religious link (Messianic Church). The fundamental principle is that agricultural activities must respect the laws of nature, reducing interference with the ecosystem to a minimum. Therefore, in practice it is not recommended to turn the soil, nor to use organic compost with animal waste. Incidentally, the use of animal manure is radically rejected.

In practice, special products are used for the preparation of organic compounds, called efficient microorganisms (EM). These products are marketed and have a formula and patent held by the manufacturer. This model is within the norms of organic agriculture.

ORGANIC AGRICULTURE

It has no connection to any religious movement. Based on the improvement of soil fertility by a natural biological process, by the use of organic matter, which is essential to plant health. Like the other currents, this proposal is totally opposed to the use of soluble chemical fertilisers. The principles are basically the same as those of organic agriculture.

It presents a set of well-defined standards for the production and commercialization of production determined and accepted internationally and nationally. Currently, the name organic agriculture is used in countries of Anglo-Saxon, Germanic and Latin origin. It can be considered as synonymous with organic agriculture and encompasses the agricultural practices of biodynamic and natural agriculture.

Source: Magalhães (2004).

Normative aspects for organic production.

In the 1970s, the first organic products began to appear in Europe. The movement solidified at the end of the 1980s, with its greatest growth in the mid-1990s, with the program established by the EEC Council Regulation in document 2092/91, of June 24th, 1991, which established the norms and standards for the production, processing, commercialization and import of organic products of plant and animal origin in its member states. This document has been frequently amended to incorporate advances in the production, processing and commercialization practices of these products (ORMOND *et al.*, 2002, p. 9).

The forms of organic production had been growing disorderly without technical management criteria. Then, some countries began to enact laws to regulate the forms of commercialization of organic products, including Brazil, which “in the 1990s, some regulations began to emerge, but it was only in 2003, with the approval of Law No. 10,831, that the country had an effective legal framework on organic production in the internal and external spheres” (BRITO *et al.*, 2022, p. 5).

To encourage agroecology and organic production, the federal government developed, through Decree No. 7,794 of August 20th, 2012, the National Plan for Agroecology and Organic

Production (PNAPO), with the objective of integrating, articulating and adapting policies, programs and actions that induce the agroecological transition and organic and agroecological production. contributing to the sustainable development and quality of life of the population, through the sustainable use of natural resources and the supply and consumption of healthy food (MAPA, 2012). It was a very important decree in the expansion of actions to promote sustainable rural development, contributing to the supply and consumption of rationally produced food, stimulating the permanence of natural resources.

The rules on organic production in Brazil have been improving over the years, through a set of requirements that must be enforced by producers, processing industries and traders. Table 2 shows a summary of organic regulations in Brazil.

Table 2.
Main Organic Regulations in Brazil.

Normative	Definition
Global Forum of Non-Governmental Organizations and Social Movements (<i>Foro Global de Organizações Não Governamentais e Movimentos Sociais - ECO 92</i>)	Issues related to sustainable agriculture, food security, drinking water and fishery resources were addressed in order to ensure environmental and food quality, resulting in the construction of sustainable development strategies called “Agenda 21” (CAMARGO, 2002).
MA Ordinance No. 178, August 1994	Creation of the special commission to propose standards for the certification of organic products (CAMARGO, 2002).
Normative Instruction (IN) No. 007 from 1999	Provides for standards for the typification, processing, packaging, distribution, identification and certification of the quality of organic products, whether of animal or vegetable origin (BRASIL, 1999).
Law No. 10.831 from 2003	Concepts regarding organic production, the purpose of an organic production system, and establishes some parameters in relation to certification, inspection and supervision of production (BRASIL, 2003).
Decree No. 6.323 from 2007	Regulates Law No. 10,831 of 2003, without prejudice to compliance with other standards that establish other measures related to the quality of products and processes (BRASIL, 2008).
Normative Instruction (IN) No. 46 from 2011	Since January, 1 st 2011, all production systems that are not conventional to call themselves “organic” and use the new seal of the Brazilian System of Organic Conformity Assessment only after passing through the sieve of authorized certifying institutions will be inspected by Brazilian legislation (Law No. 10,831). IN 64/2008 was repealed and IN 46/2011 entered into force, which included some modifications (BRASIL, 2011).

Source: Adapted from Muñoz *et al.* (2016).

According to Muñoz *et al.* (2016, p. 365) [...] “There is no common or general regulation that can be applied to productions that govern under organic agricultural practices, because

each country independently regulates the market for organic products, and most countries have basic legislation”.

In many countries of the world, there are a large number of organic norms, which may be governmental or not, others are private norms, some are very specific to each region. [...] “The International Federation of Organic Agriculture Movements (*Movimentos de Agricultura Orgânica* - IFOAM), has developed a set of standards officially approved as organic by the international organic movement and which in some way outline a criterion for distinguishing between organic and non-organic. The approval of each standard is based on a detailed technical evaluation of them, following a procedure determined by the organic guarantee system” (MUÑOZ *et al.* 2016, p. 365).

The production of organic food had been treated without technical criteria and needed to undergo conformity assessments, determined by legislation. For Brito *et al.* (2022, p. 6-7), “conformity assessment is defined as the 'systematic examination of the degree of compliance by a product, process, or service with specified requirements. By law, three forms of organic conformity assessment are allowed in Brazil”. Table 3 shows the three forms of organic conformity assessment in Brazil, which are: Certification by Audit; the Participatory Guarantee System (GSP) and Social Control Organization (OCS)

Table 3.

It shows the three forms of organic conformity assessment in Brazil.

TYPES OF CERTIFICATION	TYPES OF COMMERCIALIZATION OF ORGANIC PRODUCTS
Certification by Audit	Certification by audit grants the producer the seal of the Brazilian System of Organic Conformity Assessment (SisOrg), which was established by Decree No. 6.323/07 and integrated by agencies and entities of the federal public administration and by the conformity assessment organs accredited in MAPA One of the rules established for certification by audit is that the evaluator is unrelated to the production process, that is why certification by audit is also called third-party certification.
The Participatory Guarantee System (PGS)	The PGS is the participatory conformity assessment modality that has the same recognition as the audit and is composed of two groups: The members of the systems and the Participatory Conformity Assessment Organs (OPACs). It is responsible for assuming the formal relationship with MAPA, launching and updating the data of the production units that are part of the PGS. The members of the systems, on the other hand, can be composed of individuals and/or legal entities, which are divided into two categories: Suppliers and employees. Suppliers are made up of farming families, processors, distributors, traders, transporters and stockers. Employees are consumers, technicians, public or private organizations, partner NGOs, among others.

Social Control
Organization
(SCO)

The Social Control Organization (SCO) want, unlike the PGS and the audit, the use of the SisOrg seal is not available to the farmer. Because of this, farmers participating in this modality must market their production only through direct sales. Only family farmers can participate in the SCO, which, like the PGS, is characterized by the Social Control and Joint Responsibility that the system provides. The SCO can be formed by a group, an association, a cooperative, a magazine of Rural Economy and Sociology.

Source: Brito *et al.* (2022, p. 6-7).

Economic aspects for the production, commercialization and certification of organic products.

The standards for the production and commercialization of organic products were established by the Ministry of Agriculture on May, 17th 1999. The organs responsible for certification, in addition to publicizing the producers and certified companies. It also has the function of supervising the frameworks in the official basic standards, aiming to preserve the fundamental bases of organic production, seeking to ensure the production of healthy and quality food, with the maintenance and protection of the ecosystem (PENTEADO, 2001, p. 20).

MAPA Normative Instruction No. 19 of May, 28th 2009 establishes some information on the inspection and commercialization of organic products. IN 19/2009 highlights that: The first mechanism concerns family farmers, who must meet the requirements established for direct sales without certification, but as members of a social control organization (OCS). The other two mechanisms are for direct sales by non-family producers and for indirect sales, all of which must meet the requirements established by the Brazilian Organic Conformity Assessment System (*Sistema Brasileiro de Avaliação da Conformidade Orgânica - SISORG*).

SISORG is made up of agencies and organizations of the federal public administration and conformity assessment organs (CAOs) accredited by MAPA with qualitative and quantitative information on marketed products, in order to allow their control and traceability. The OACs are formed by legal entities, under public or private law, responsible for verifying the conformity of the production processes evaluated in relation to the regulation of organic production, both in the certification and in the Participatory System of Organic Quality Assurance.

“From the great growth in the production and demand of organic products in Brazil, several commercialization channels have emerged in recent years, with organic products sold in different channels, such as street markets, home baskets, government programs, etc.” (FARIAS, 2022, p. 2).

Other commercialization channels that are being built and stimulated are institutional markets (school lunches, daycare centers, hospitals, restaurants). There are federal, state and municipal policies for the “acquisition of organics” established since 2003, with a focus on food security, which stimulate the markets regarding the awareness of producers about the use of inputs and

consumers about the benefits of consuming organic food. An example is the PAA, a partnership between the Ministry of Social Development (MDS) and the Ministries of Agriculture, Livestock and Supply (*Ministérios da Agricultura, Pecuária e Abastecimento* - MAPA), executed at the state level by CONAB, through which purchases reached US\$ 7.993 million in 2005 (FONSECA, 2009, p. 36).

Based on Riva's observations (2018, p. 44) 'the main obstacles faced are: Small scale production; seasonality of production; difficulties in maintaining a standard of product quality; high-cost, low-volume transportation'.

According to Riva (2018, p. 46), before the rural producer enters this market, he must observe the existence of groups in his production location, to discuss and think about methods and actions that make it possible to add new market and organization opportunities, because alone, without an initial collective articulation, it is very likely that the small scale of production and the high costs of commercialization make the business unfeasible.

In this way, the main commercialization channels for organic products are supplied by farmers linked to associations and cooperatives and access to the different commercialization channels promotes a diversification strategy.

Materials and Methods

The present study is a systematic review of the literature. This study was conducted in October and November 2022. The systematic review study was carried out with the objective of identifying issues related to organic agriculture on the following subjects: Organic agriculture; historical, normative and economic aspects for organic production. "The review is a research methodology that allows, through the application of well-defined and systematized search methods, to find studies on a topic in question" (De-La-Torre-Ugarte-Guanilo *et al.*, 2011, p. 1).

Through systematic review studies, Cronin *et al.* (2008, p. 39) proposed a protocol involving the following steps: Formulation of the research question; set of inclusion and exclusion criteria; selection and access to literature; evaluation of the quality of the literature included in the review; analysis, synthesis and dissemination of results.

In view of this protocol model, we began to describe in detail the criteria for the study:

1. For the formulation of the research question, we tried to find answers to the following questions formed by keywords: "Organic agriculture"; "Historical aspects for organic production"; "Normative aspects for organic production" and "Economic aspects for organic production".

2. In the inclusion and exclusion criteria, several articles were selected, which were: SciELO; Google; Google Scholar and Digital Library of Periodics, all full articles. Keywords such as “Organic agriculture” were used; “Historical aspects for organic production”; “Normative aspects for organic production” and “Economic aspects for organic production”. Out-of-context documents have been deleted.

3. Eight searches were conducted between October and November 2022, and 43 articles were found on the Google Scholar platform, SciELO, and digital library. Thus, 17 articles were selected to address the proposed themes. The research began on the Google Scholar platform, on which 34 articles were found, and only 13 articles were used for the study. On the SciELO platform, 4 articles were found, and 1 article was used. On the digital library platform, 5 articles were found, and only 3 articles were used. The following keywords were used in all surveys: Organic agriculture; Historical aspects for organic production; Normative aspects for organic production and Economic aspects for organic production. A total of 17 articles were considered suitable for analysis and 26 articles were discarded. The discarded articles did not meet the starting questions proposed for this study. In order to corroborate the study, we also used: Federal decrees, technical standards and normative instructions. Table 4 shows in detail the articles found, discarded and suitable for analysis.

Table 4.

Articles found, discarded and suitable for analysis.

DATABASE	FOUND	DISCARDED	FIT FOR ANALYSIS
Google Scholar	34	21	13
SciELO	4	3	1
Digital library	5	2	3
Total	43	26	17

Source: The authors (2024).

Through the searches on the above mentioned platforms, it was observed that the Google Scholar platform was the one that found the most articles related to the themes proposed for analysis.

4. After evaluating the articles, it was concluded that 17 of them were able to answer the research questions, to be used and were selected for the study. A reading was carried out with subjects related to the theme involved: Authors, year of study, theme, area of knowledge, purpose of the research.

5. After analyzing the contents suitable for study, the results were obtained and described and presented in Table 5. The articles that were discarded were not used for the study.

Table 5.

Articles analyzed, authors, year of study, theme, area of knowledge and purpose of the research.

Authors	Year of study	Theme	Knowledge area	Research purpose
BATISTA, C. L. R.; STOFFEL, J.	2022	Agroecology and Organic Production: Characteristics that distinguish and/or bring sustainable production systems closer together.	Agricultural	Debate on organic production and agroecology.
BRITO, T. P.; ARAGÃO, S. S.; SOUZA ESQUERDO, V. F.; & PEREIRA, M. S.	2022	Profile of organic farmers and forms of assessment of organic conformity in the state of São Paulo.	Agricultural	Identify the profile of organic producers in the state of São Paulo, analyzing the spatial distribution, the organic conformity assessment system adopted and the productive diversity.
ENGEL, V. L	1999	Agroforestry Systems: Concepts and Applications.	Agricultural	Describe agroforestry as a new paradigm of sustainable development.
FARIAS, L. F.; SOARES, L. P.; SOUSA, R. L.	2022	The organic market and the prices practiced in the main commercialization channels in the city of Goiânia, GO.	Agricultural	To better understand the commercialization of organic products and the prices charged in relation to conventional ones.
FONSECA, M. F. de A. C.	2009	Organic agriculture: Technical regulation and access to markets for organic products in Brazil.	Agricultural	Clarifying, in a general way, the regulation of organic agriculture.
LIMA, S. K.; GALIZA, M.; VALADARES, A.; ALVES, F.	2020	Production and consumption of organic products in the world and in Brazil.	Agricultural	Describe and analyze the particularities and challenges for the production and consumption of organic products in Brazil.
MAGALHÕES, E. da S.	2004	Organic Agriculture in the Federal District (<i>Distrito Federal</i>): An Exploratory Analysis.	Agricultural	Recognize the importance of organic products and their market potential.
MUÑOZ, C. M. G.; GÓMEZ, M. G. S.; SOARES, J. P. G.; JUNQUEIRA, A. M. R.	2016	Organic Production Regulations in Brazil: The perception of family farmers in the settlement of Chapadinha, Sobradinho (DF).	Laws, Norms and Decrees	Determine the degree of knowledge and adherence of family producers in the rural settlement Chapadinha, in Sobradinho (DF).
NEVES, J.; IMPERADOR, A.	2022	The contribution of organic agro-ecosystems in the south of Minas Gerais.	Agricultural	Identify the scenarios presents in the organization of organic farmers from the south of Minas Gerais for the production of ecologically based food and locate the alternative distribution routes present in the territory.

ORMOND, J. G. P.; PAULA, S. R. L.; FILHO, P. F.; ROCHA, L. T.	2002	Organic agriculture: when the past is the future. BNDES Sectorial.	Agricultural	Identify and analyze the main obstacles to the development of the sector, such as costs, credit, packaging, certification, in addition to presenting, in a schematic way, the relationship between the main agents of the production chain.
PENTEADO, S. R.	2001	Organic agriculture.	Agricultural	Address the various movements or processes that adopt basic principles (agroecological).
ROVER, O. J.; PUGAS, A. S.; M. C.	2021	Short Commercialization Circuits and Control Mechanisms in Organic Agriculture: Analyzing the potential for agroecological green belts.	Agricultural	Analyze the potential of Social Control Organs (SCO) - a mechanism for the regularization of organic food for direct sale without certification - in the formation of agroecological green belts (CVA).
SANTOS, J. O.; SANTOS, R. M. S.; BORGES, M. G. B.; FERREIRA, R. T. F. V.; SALGADO, A. B.; SEGUNDO, O. A. S.	2012	The Evolution of organic agriculture.	Agricultural	Inform about organic agriculture.
SANTOS, G. C. dos. MONTEIRO, M.	2004	Organic Food Production System.	Agricultural	Gather information on the organic production system, focusing on everything from food production to the nutritional aspect and sensory quality of products.
SILVA, C. M. da	2004	Alternative Agriculture and Sustainability: The case of the New Lives Settlement (Assentamento Novas Vidas) in Ocara, Ceará.	Agricultural	Analyze the implications of alternative agriculture in the New Lives settlement (Assentamento Novas Vidas) - Ocara - CE.
SILVA, I. F.; OYAMBURO, D. C. S.; INÁCIO, L. R.; FERNANDES, L. M.; BECKER, C.	2022	What is the scenario of organic production in Brazil? Approximation based on secondary data from the agricultural census and the national registry of organic producers.	Agricultural	To constitute an analysis of the available data and processes on the production and consumption networks of organic food in our country.
VOGT, G.	2007	The origins of organic farming. In W. Lockeretz.	Agricultural	Informing about the origins of organic agriculture.

Source: The authors (2024).

The selected articles, in a total of 23 works, were briefly presented about the beginning of organic agriculture. As well as the Brazilian legislation for the standardization of the activity and the forms of commercialization of these products in Brazil.

Results and Discussions

The objective of this work was to geographically study the production of organic food in the world and in Brazil. Studying the historical, normative and economic aspects for organic production, its trend and importance from a descriptive review of the theme.

From the articles analyzed, the historical, normative and economic aspects of products from organic agriculture were studied, as organic agriculture arose from a demand for sustainably produced food. Totally different from conventional production, where agrochemical products are used, contributing to the degradation and pollution of natural resources. According to Farias (2022, p. 6), “sustainable agriculture, unlike conventional agriculture, seeks to achieve the three pillars of sustainability: Economic viability, social development, and environmental preservation”.

According to the work carried out by Santos *et al.* (2012, p. 2), organic agriculture is defined as a set of management practices that can contribute to the fixation of man in the field, as well as to the reduction of the use of pesticides, organic agriculture is also seen as an ecologically sustainable and economically viable production activity at all scales of production.

Government institutions have contributed to the standardization of the production and commercialization of organic products. Ensuring better control and confidence in the products sold. Federal, state and municipal public policies have been improving and contributing to the acquisition and commercialization of agroecological and organic products.

The studies carried out by Fonseca (2019, p. 27) portray the importance of institutions where he states that “the institutionalization of organic agriculture in the world began in 1972, with the creation of IFOAM - International Federation of Organic Agriculture Movements and the publication of its first standards, in 1978. The IFOAM's private standards served as a reference for the commercialization of organic products in the world until the 90s and for the establishment of other local standards and technical regulations in different countries”.

“Organic certification is an important tool that adds value to the product and recognition to the farmer. Participatory systems contribute to the construction of networks of trust, autonomy, governance and new channels of food distribution” (NEVES *et al.*, 2022, p. 4).

According to the studies on certifications carried out by Muñoz *et al.* (2016), Decree No. 6,323 of 2007, in title III of chapter V, establishes the parameters regarding the control mechanisms provided for in Article 25, where individuals or legal entities, under public or private law, who produce, transport, market or store organic products are obliged to promote the regularization of their activities with the competent organs.

Currently, organic agriculture provides products for direct consumption, with the main ones being: Dairy, canned food and fresh vegetables. And, that this production is concentrated in the states of São Paulo, Minas Gerais, Espírito Santo, Paraná and Rio Grande do Sul, where they are sold in fairs and natural products stores (SILVA, 2004, p. 16).

In recent years, the world has been experiencing health and economic problems. This has contributed to the decrease in food production. There has been a decrease in food production around the world and government changes have not contributed to improving the sector. According to Neves *et al.* (2022, p. 3-4), “despite the disasters of public policies for organic agriculture during the pandemic period, there was an increase in the number of organic farmers registered with the Ministry of Agriculture, Livestock and Supply - MAPA. Characterizing a Growth in Demand for Healthy Foods”.

We can observe that there is a relationship of trust and traceability in regional development, as shared environmental management increases guarantees in relation to the production of healthy food, decent work and energy efficiency. “Social management and participation favors associativism, contributing to the creation of networks between producers and consumers. With this, it improves the territorialization of the food production-consumption relationship, promotes consumer awareness and appreciation of local products” (ROVER, 2021, p. 17).

Final Considerations

The production of organic and agroecological food has been improved over the years, improving the forms of production, and contributing to a healthier diet without the risk of environmental degradation. Also, the demand for jobs focused on the production of agrochemical-free food is gaining prominence in the world scenario.

The normative legislation contributes to a better organization of the production processes, ensuring safe products for the population.

The advancement of the points of commercialization of products from organic, agroecological, natural and related agriculture, has been strengthening the bonds of trust between producer and consumer. Another narrowing is related to government programs (PAA, PNAE), street markets, supermarkets, sales by apps, etc.

Finally, organic agriculture is a great alternative for small, medium and large producers, since the market has been expanding and diversifying the products from agroecology. The number of consumers of organic products is only increasing. With this, you will be able to have increases in productive areas and consequently new farmers will start producing.

REFERENCES

- Batista, C. L. R.; Stoffel, J. *Agroecologia e Produção Orgânica: Características que distinguem e/ou aproximam os sistemas de produção sustentáveis*. Colóquio – Revista do Desenvolvimento Regional - Faccat - Taquara/RS - v. 19, Edição especial (SOBER), 2022.
- Lei nº 10.831, de 23 de dezembro de 2003. <https://www.gov.br/agricultura/pt-br/assuntos/sustentabilidade/organicos/Legis-lacao/portugues/lei-no-10-831-de-23-de-dezembro-de-2003.pdf>.
- Decreto Nº- 7.794, de 20 de agosto de 2012 Institui a Política Nacional de Agroecologia e Produção Orgânica. <https://www.gov.br/agricultura/pt-br/assuntos/sustentabilidade/organicos/legislacao/Portugues/decreto-no-07-794-de-20-de-agosto-de-2012.pdf/>.
- Brito, T. P.; Aragão, S. S.; Souza-Esquerdo, V. F.; & Pereira, M. S. (2023). *Perfil dos agricultores orgânicos e as formas de avaliação da conformidade orgânica no estado de São Paulo*. Revista de Economia e Sociologia Rural, 61(3), e260825. <https://doi.org/10.1590/1806-9479.2022.260825>.
- Cronin, P.; Ryan, F.; Coughlan, M. *Undertaking a literature review: a stepby-step approach*. British journal of nursing, v. 17, n. 1, p. 38-43, 2008.
- De-La-Torre-Uguarte-Guanilo, M. C.; Takahashi, R. F.; Bertolozzi, M. R. *Revisão sistemática: noções gerais*. Rev. esc. enferm. USP [online]. 2011, vol.45, n.5, pp.1260-1266.
- Engel, V. L. *Sistemas Agroflorestais: Conceitos e Aplicações*. Botucatu: FEPAF, 1999. 70 p. 2 Recursos Naturais/FCA - Unesp/Botucatu.
- Farias, L. F.; Soares, L. P.; Sousa, R. L. *O mercado de orgânicos e os preços praticados nos principais canais de comercialização na cidade de Goiânia – GO*. Iheringia, Série Botânica, Porto Alegre, 77: e 2022009, 2022.
- Fonseca, M.F. de A.C. *Agricultura Orgânica: Regulamento técnico e acesso aos mercados dos produtos orgânicos no Brasil*. Niterói: PESAGRO – RIO, 2009.
- IFOAM International Federation Of Organic Agriculture Movements *Normas Básicas para a Produção e Processamento de Alimentos Orgânicos* (IFOAM General Assembly em Mar Del Plata/Argentina, novembro 1998).
- Lima, K.; Aliza, M.; Valadares, A.; AlveS, F. *Produção e consumo de produtos orgânicos no mundo e no Brasil*. Texto para discussão / Instituto e Pesquisa Econômica Aplicada. Brasília: Rio de Janeiro: IPEA, 2020, 44 p.
- Magalhães, E. da S. *Agricultura Orgânica no Distrito Federal: Uma Análise Exploratória*. Brasília – DF – dezembro de 2004.

- MAPA - Ministério da Agricultura, Pecuária e Abastecimento – *Cadastro Nacional de Produtores Orgânicos*. Publicado em 09/03/2017 16h10 Atualizado em 03/11/2022 17h07. <https://www.gov.br/agricultura/pt-br/assuntos/sustentabilidade/organicos/cadastro-nacional-produtores-organicos>.
- MAPA - Ministério da Agricultura, Pecuária e Abastecimento – *Instrução Normativa nº 19 de 28/05/2009*. <https://www.legisweb.com.br/legislacao/?id=78103>. 03/11/2022 17h07.
- Muñoz, C. M. G.; Gómez, M. G. S.; Soares, J. P. G.; Junqueira, A. M. R. *Normativa de Produção Orgânica no Brasil: a percepção dos agricultores familiares do assentamento da Chapadinha, Sobradinho (DF)*. RESR, Piracicaba-SP, Vol. 54, Nº 02, p. 361-376, Abr/Jun 2016 – Impressa em Junho de 2016 DOI: 10.1590/1234.56781806-947900540209.
- Neves, J.; Imperador, A. *A contribuição dos agroecossistemas orgânicos do Sul de Minas Gerais*. Caderno de Agroecologia – ISSN 2236-7934 – Anais da reunião técnica sobre agroecologia - Agroecologia, Resiliência e Bem Viver – Pelotas, RS – v17, n3, 2022.
- Ormond, J. G. P.; Paula, S. R. L.; Filho, P. F.; Rocha, L. T. *Agricultura Orgânica: quando o passado é futuro*. BNDES Setorial, Rio de Janeiro, n. 15, p. 3-34, mar. 2002.
- Penteado, S. R. *Agricultura Orgânica*. Piracicaba: ESALQ - Divisão de Biblioteca e Documentação, 2001.
- Riva, L. W. da. *Orgânicos: produção sustentável economicamente viável* - capítulo IV - Cadeia produtiva de alimentos e produtos - Livro Eletrônico 1ª Edição Londrina 2018. Disponível em: <http://www.uel.br/cca/dcta/pages/livro.php> ISBN 978-85-7846-475-2.
- Rover, O. J.; Puga, A. S.; M. C. *Circuitos Curtos de Comercialização e Mecanismos de Controle na Agricultura Orgânica*. Analisando o potencial de formação de cinturões verdes agroecológicos. CAMPO-TERRITÓRIO: Revista de Geografia Agrária, v. 16, n. 43, p. 378-399, dez., 2021.
- Santos, J. O.; Santos, R. M. S.; Borges, M. G. B.; Ferreira, R. T. F. V.; Salgado, A. B.; Segundo, O. A. S. *A Evolução da Agricultura Orgânica*, Revista Brasileira de gestão Ambiental – RBGA. Pombal-PB, 2012.
- Santos, G. C. dos. Monteiro, M. *Sistema Orgânico de Produção de Alimentos*. Departamento de Alimentos e Nutrição – Faculdade de Ciências Farmacêuticas – UNESP – 14801-902 – Araraquara – SP – Brasil. Alim. Nutr., Araraquara, v.15, n.1, p.73-86, 2004.
- Silva, C. M. da. *Agricultura alternativa e sustentabilidade: o caso do Assentamento Novas Vidas em Ocara, Ceará/ Cristiane Moreira da Silva*. – Fortaleza: UFC, 2004. 101p.
- Silva, I. F.; Oyamburo, D. C. S.; Inácio, L. R.; Fernandes, L. M.; Becker, C. *Qual o cenário da Produção orgânica no Brasil? Aproximação a partir de dados secundários do censo agropecuário e do cadastro nacional de produtores orgânicos*. Cadernos de Agroecologia - ISSN 2236-7934 -

Anais da Reunião Técnica sobre Agroecologia -Agroecologia, Resiliência e Bem Viver - Pelotas, RS - v. 17, n. 3, 2022.

Vogt, G. *The origins of organic farming*. In W. Lockeretz (Ed.), *Organic farming: an international history* (pp. 9-29). Wallingford: CABI. 2007.