

THE TREATMENT DISPENSED TO THE TYPICAL FOREST OF THE ATLANTIC FOREST BIOME INSERTED IN THE CERRADO BIOME

Alessandra Marques Serrano¹

¹Universidade Federal de Ouro Preto, Programa de Pós-Graduação em Engenharia Ambiental, Ouro Preto, MG, Brasil – ales.serrano@gmail.com

Received for publication: 09/01/2019 – Accepted for publication: 12/01/2022.

Resumo

O tratamento dispensado à floresta típica do bioma Mata Atlântica inserida no bioma Cerrado. O estudo teve como fim discutir sobre a proteção dispensada às formações florestais típicas do bioma Mata Atlântica inseridas no bioma Cerrado e identificar os comandos protetivos e normativos a serem observados quando autorizada a supressão desta vegetação. A opção metodológica foi por um levantamento de literatura, nas modalidades exploratórias e explicativas, com uma abordagem qualitativa. Os estudos foram realizados em artigos e em normas dedicadas aos biomas Mata Atlântica e ao Cerrado. O estudo da Mata Atlântica abrangeu o território brasileiro e o estudo do bioma Cerrado, por respeitar regras gerais de proteção à vegetação nativa, limitou-se aos estados de São Paulo e Minas Gerais, que dispõem de normas específicas de proteção. Do pesquisado, foi observado que a proteção dispensada à vegetação inserida no bioma Mata Atlântica por meio da Lei n°. 11.428, de 2006, estende-se à vegetação inserida no bioma Cerrado quando esta se caracterizar como formações florestais típicas do bioma Mata Atlântica, considerando, principalmente, o exposto na Constituição Federal de 1988, que reconhece a Mata Atlântica como patrimônio nacional e o seu uso deve assegurar a conservação do ambiente no qual ela estiver inserida. Também se justifica esta extensão de proteção porque a norma cria critérios normativos para a vegetação onde quer que ela esteja e não somente na área de abrangência do bioma Mata Atlântica delimitada pelo mapa do Instituto Brasileiro de Geografia e Estatística.

Palavras-chave: Disjunção da Mata Atlântica no bioma Cerrado; Proteção equivalente; Lei n° 11.428, de 2006; Patrimônio Nacional.

Abstract

The study aimed to discuss the protection given to forest formations typical of the Atlantic Forest biome inserted in the Cerrado biome and to identify the protective and normative commands to be observed when the suppression of this vegetation is authorized. The methodological option was for a literature survey, in exploratory and explanatory modalities, with a qualitative approach. The studies were carried out in articles and in norms dedicated to the Atlantic Forest and Cerrado biomes. The study of the Atlantic Forest covered the Brazilian territory and the study of the Cerrado biome, as it respects general rules for the protection of native vegetation, was limited to the states of São Paulo and Minas Gerais, which have specific protection rules. From the researched, it was observed that the protection given to the vegetation inserted in the Atlantic Forest biome through Law n°. 11,428, of 2006, extends to the vegetation inserted in the Cerrado biome when it is characterized as typical forest formations of the Atlantic Forest biome, considering, mainly, the exposed in the Federal Constitution of 1988, which recognizes the Atlantic Forest as a national heritage and its use must ensure the conservation of the environment in which it is inserted. This extension of protection is also justified because the norm creates normative criteria for vegetation wherever it is and not only in the area covered by the Atlantic Forest biome delimited by the map of the Brazilian Institute of Geography and Statistics.

Keywords: Disjunction of the Atlantic Forest in the Cerrado Biome; Equivalent protection; Law 11,428 of 2006; National Heritage.

INTRODUCTION

The Atlantic Forest was recognized by the Constitution of the Republic of Brazil of 1988 (CRB/88) in its art. 225, as national heritage, demanding special treatment from the legislator in the formalization of infra-constitutional instruments. This command established that the use of vegetation inserted in the Atlantic Forest must comply with conditions that ensure the conservation of the environment, even when natural resources are used (BRASIL, 1988).

The specific rule that takes care of the use and protection of the native vegetation of the Atlantic Forest biome is the Federal Law n°. 11,428 of 2006 (BRASIL, 2006), regulated by Decree n°. 6,660, of 2008 (BRASIL, 2008).

In addition to the norm that provides guidelines for the use and protection of the forest in the Atlantic Forest biome, the norm that provides guidelines for environmental crimes (Federal Law n°. 9605, 1998) also provided both administrative penalties and by penal sanctions, for acts contrary to those foreseen in the referred rule (BRASIL, 1998).

Therefore, it is an environmental crime *to destroy or damage primary or secondary vegetation, in an advanced or medium stage of regeneration, of the Atlantic Forest biome, or to use it in breach of protection rules*, as provided for in Federal Law n°. 9,605 of 1998, in its art. 38-A.

Constitutionally provided for by art. 24 of CRB/88, both the States and the Union have autonomy to legislate on forests and other forms of native vegetation, however, in the case of national heritage, the use and protection of the Atlantic Forest were regulated for application in Brazilian territory.

For deliberation on requests for intervention in native, either primary or secondary vegetation, in medium and advanced stages of regeneration, the States have the autonomy to deliberate, as provided by Complementary Law n°. 140 of 2011, that:

Establishes rules, under the terms of items III, VI and VII of the caput and the sole paragraph of art. 23 of the Federal Constitution, for cooperation between the Union, the States, the Federal District and the Municipalities in administrative actions arising from the exercise of common competence related to the protection of remarkable natural landscapes, the protection of the environment, the fight against pollution in any of its forms and the preservation of forests, fauna and flora; and amends Law n°. 6,938, of August 31, 1981 (BRASIL, 2011).

The rule dedicated to the subject under study reserved to the Union the obligation to consent or not, when it involves a rural area greater than fifty hectares per enterprise, individually or cumulatively. In the case of urban areas or metropolitan regions, this obligation of manifestation of the federal agency was reduced to areas greater than three hectares, per enterprise, isolated or cumulatively. The procedure for the use and protection of forest formations within the Atlantic Forest biome is regulated by Decree n°. 6,660 of 2008.

For the application of the rule, the map edited by the Brazilian Institute of Geography and Statistics (IBGE, 2006) was adopted, delimiting the area of application of Law n°. 11,428 of 2006 for the purpose of using and protecting the Atlantic Forest biome. It happens that, outside the area delimited in the IBGE map, that is, mostly in the Cerrado biome, there are typical Atlantic Forest forests, so would these native vegetation areas be without special protection dedicated to the Atlantic Forest biome?

The biome, according to Marino et al. (1980, p. 18), is a large-scale ecosystem that covers an area of a continent, in which a particular type of vegetation prevails and a certain type of climate occurs.

As the Atlantic Forest is a national heritage, it has a specific rule applicable to the national territory, different from the Cerrado biome, which is subject to general rules for the protection of native vegetation, and the federated states may establish specific rules dedicated to the Cerrado biome. Therefore, in this study, the norms issued by the states of Minas Gerais and São Paulo were brought as an example to enhance the study of the Cerrado biome.

In this article, the two biomes, Atlantic Forest and Cerrado, were analyzed, approaching the possibilities of use and forms of protection of each vegetation inserted there, as well as on the use and protection of the disjunctions of the Atlantic Forest in the Cerrado, to understand the conclusion.

MATERIAL AND METHODS

Characterization of the study area

For the study on the protection given to forest formations, typical of the Atlantic Forest biome and inserted in the Cerrado biome, as well as the protective and normative commands to be observed when the suppression of this vegetation is authorized, a survey of the environmental norms in force in the Brazilian territory was carried out, as well as in the literature related to environmental law, considering the period from 1964 to 2019.

The Atlantic Forest is present in 17 Brazilian states: Alagoas, Bahia, Ceará, Espírito Santo, Goiás, Minas Gerais, Mato Grosso do Sul, Paraíba, Pernambuco, Piauí, Paraná, Rio de Janeiro, Rio Grande do Norte, Rio Grande do Sul, Santa Catarina, Sergipe e São Paulo. The Cerrado biome is found in the Brazilian states of Bahia, Distrito Federal, Goiás, Maranhão, Mato Grosso, Mato Grosso do Sul, Minas Gerais, Paraná, Piauí, Rondônia, São Paulo and Tocantins.

For the analysis of the application of the Atlantic Forest Law in the Brazilian territory, the study was carried out considering the specific Law that takes care of the Atlantic Forest in the national territory. For the study of the Cerrado biome, the norms published by the states of Minas Gerais and São Paulo were researched, as an example, since the focus of the research is the Atlantic Forest.

Data collection and analysis

The methodology used in the studies was the survey of the literature, in the exploratory and explanatory modalities, with a qualitative approach on the use and protection of the vegetation inserted in the Atlantic Forest biome and its disjunctions, within the Brazilian territory.

In this context, the beginning of the research had the Federal Constitution of 1988 as a basis and Federal Law nº. 11,428 of 2006, which provides for the use and protection of native vegetation of the Atlantic Forest biome, as a supporting standard.

Other regulations that were also analyzed were the complementary Law nº 140 of 2011; Federal Law nº. 9,605 of 1998; Federal Decree nº. 6,660 of 2008; the Constitution of the State of Minas Gerais of 1989, the State Laws of Minas Gerais nº. 10,561, 1991, nº. 13,047, 1998; nº. 14,309, 2002; nº. 20,922 of 2013; in addition to the São Paulo State Law nº. 13,550 of 2009.

The information collected was organized in chronological order and the content analysis of the norms that govern the use and protection of the vegetation inserted in the Atlantic Forest biome was carried out, as well as the analysis of the content contained in the environmental literature on the subject.

RESULTS

The use and protection of the Atlantic Forest

The Atlantic Forest is composed by native forest formations and associated ecosystems, and, as provided by Federal Law nº 11,428 of 2006, formations such as seasonal semideciduous forest, seasonal deciduous forest, mangroves, restinga vegetation, altitude fields, inland swamps and forest enclaves in the northeast are members of it.

The Atlantic Forest, recognized as a national heritage by CRB/1988, is the second most endangered biome in the world, according to information extracted from the veto message referred to in art. 27 of Federal Law nº. 11,428 of 2006. Of the original area of coverage of the Atlantic Forest estimated at about 1,300,000 km² of the Brazilian territory, only about 169,000 km² remain, according to data from the National Institute for Space Research (INPE, 2020).

Despite the considerable reduction of vegetation in this biome, it is still the Atlantic Forest that harbors one of the highest rates of biodiversity in the world. Part of this biodiversity is protected due to the creation of integral protection conservation units, according to the veto reasons of art. 27 of Federal Law nº. 11,428 of 2006.

From what was observed in the literary research, it is important to mention that the rule dedicated to the matter protects the native vegetation of the Atlantic Forest biome and not the area inserted in that biome, because, although exotic vegetations are inserted in the Atlantic Forest biome, they will not receive special treatment, and, therefore, they may undergo interventions under the terms of general and state regulations, with no special protection for pasture areas, areas occupied with agriculture and forestry crops.

However, there is an exception to what was mentioned above relevant to the present study, since the norm that takes care of the Atlantic Forest – Federal Law nº. 11,428 of 2006 - in its art. 5, warns that primary vegetation or vegetation at any stage of regeneration in the Atlantic Forest biome will not lose this classification in the event of fire, deforestation or any other type of unauthorized or unlicensed intervention, which means that anyone who does not comply with the norm should reconstitute the flora or lead it to regeneration.

In general, the Law on the use and protection of the Atlantic Forest established in its art. 11 the fences for the cutting, suppression, and exploitation of vegetation when, for example, the owner or squatter does not respect the permanent preservation areas or legal reserves. There is also a fence for the suppression of native vegetation when the area harbors endangered species of wild flora and fauna and the intervention or subdivision jeopardizes the survival of these species; exercise the function of protecting water sources or preventing and controlling erosion.

The Atlantic Forest Law also prohibits the cutting, suppression, and exploitation of native vegetation when the area forms corridors between remnants of primary or secondary vegetation in an advanced stage of regeneration; protect the surroundings of conservation units or have exceptional landscape value, recognized by the competent executive bodies of the National Environment System (SISNAMA).

Furthermore, the cutting, suppression, and exploitation of native vegetation, inserted in the Atlantic Forest biome, may be authorized respecting the protective criteria established for the suppression of primary or secondary vegetation in that biome.

Primary vegetation is only authorized on an exceptional basis and for the execution of works, projects or activities of public utility, scientific research, and preservationist practices. Public utility is defined by Federal Law nº. 11,428 of 2006, in its art. 3, such as national security and health protection activities, as well as essential infrastructure works of national interest intended for public transport, sanitation and energy services, declared by the federal or state public authorities.

For the analysis of the request for intervention in primary vegetation, it is necessary to present a previous environmental impact study and an environmental impact report. In addition, the technical and locational inexistence of alternatives to the project and the detailed indication, by the proponent, of the high

relevance and national interest for the suppression, according to Federal Law nº. 11,428 of 2006 in its articles 14 and 20.

To authorize the suppression of secondary vegetation in an advanced stage of regeneration, as provided for in Federal Law nº. 11,428 of 2006 in its art. 21, the existence of an exceptional situation must be observed, that is, only when the suppression is necessary for the execution of works, activities or projects of public utility, scientific research and conservation practices or for the implementation of mining ventures. In the case of urban perimeters approved before the date of publication of Federal Law nº. 11,428 (December 26, 2006), for the purpose of subdivision or construction, the suppression of native vegetation may be authorized. To this end, the projects must guarantee the preservation of native vegetation in an advanced stage of regeneration in at least 50% (fifty percent) of the total area covered by this vegetation, provided that the provisions of the municipal master plan and other urban and environmental standards are met.

In this case, it is also an obligation of the applicant to prove the inexistence of a technical and locational alternative to the enterprise for mining and public utility cases. In addition, the applicant must present an environmental impact study and an environmental impact report (EIA/RIMA) and indicate in detail the high relevance and national interest for suppression in cases of public utility, as provided for in Federal Law nº. 11,428 of 2006 in its art. 32 (BRASIL, 2006).

In relation to the use and protection of secondary vegetation in a medium stage of regeneration, the cutting, suppression and exploitation of this vegetation of the Atlantic Forest biome, is authorizable only on an exceptional basis, when necessary for the execution of works, activities or projects of public utility, research scientific and preservationist practices, as provided for in arts. 23 and 24 of the same standard.

The possibility of attending to cases of social interest was also added, brought by Federal Law nº. 11,428 of 2006 (BRASIL, 2006) in its art. 3, item VIII, for the installation and operation of mining enterprises; when necessary to small rural producers and traditional populations for the exercise of agricultural, livestock or forestry activities or uses that are essential to their own subsistence or their families. However, in these cases, except for permanent preservation areas and, when applicable, after registration of the legal reserve, which can be understood as after the completion of the rural environmental registry (CAR).

There is, however, a provision for the possibility of authorizing the use and suppression of vegetation inserted in urban perimeters approved before the date on which the Law came into force (December 26, 2006) for the purpose of subdivision or construction, provided that the projects guarantee the preservation of the native vegetation in at least 30% (thirty percent) of the total area covered by this vegetation (art. 31 inc. I). For urban perimeters delimited after the effective date of the Law, the condition for the maintenance of vegetation is of at least 50% (fifty percent) of the total area covered by this vegetation, in accordance with the municipality master plan and other applicable regulations.

In order to decide on the aforementioned interventions, the applicant is also requested to prove the inexistence of a technical and locational alternative to the enterprise in cases of mining, public utility or social interest; to submit EIA/RIMA for mining cases; and, to indicate in detail, the high relevance and national interest for suppression in cases of public utility.

The cutting, suppression, and exploitation of secondary vegetation in the initial stage of regeneration inserted in the Atlantic Forest biome may be authorized by the state environmental agencies, provided that these federative units have primary and secondary vegetation, remaining in the Atlantic Forest biome greater than 5 % (five percent) of the original area.

Of the Brazilian states, the only one that does not have a remnant of the Atlantic Forest biome greater than 5% (five percent) of the original area is the state of Goiás, which has only 3.5% of the total area of remnants of the Atlantic Forest biome (table 1) according to information compiled in the base year 2019 by SOS Mata Atlântica and published by INPE (2020, p.58).

Table 1: Natural percentage of Atlantic Forest biome vegetation and its disjunctions
Tabela 1: Porcentagem natural de vegetação do bioma Mata Atlântica e suas disjunções

UF	Federation Unity (FU) area (ha)	FU in the Atlantic Forest Law (ha)	Total floresty (ha)	% existing in relation to the original coverage
AL	2,777,724	1,524,618	150,568	9.9
BA	56,473,404	17,988,595	2,110,805	11.7
CE	14,892,047	866,120	138,714	16.0
ES	4,609,503	4,609,503	503,384	10.9
GO	34,011,087	1,190,184	41,558	3.5
MG	58,651,979	27,622,623	2,826,441	10.2
MS	35,714,473	6,386,441	711,692	11.1
PB	5,646,963	599,487	66,752	11.1
PE	9,815,022	1,690,563	210,836	12.5
PI	25,157,775	2,661,841	913,473	34.3
PR	19,930,768	19,637,895	2,453,215	12.5
RJ	4,377,783	4,377,783	859,829	19.6
RN	5,281,123	350,994	45,626	13.0
RS	26,876,641	13,857,127	1,105,322	8.0
SC	9,573,618	9,573,618	2,257,373	23.6
SE	2,191,508	1,019,753	99,067	9.7
SP	24,822,624	17,072,755	2,599,907	15.2
Total	340,804,043	131,029,898	17,094,562	13.0

Source: INPE and SOS Mata Atlântica (2020)

On the use and protection of the Cerrado

According to Medeiros (2011), the Cerrado biome covers approximately 22% of the national territory, and is the second largest Brazilian biome. This vegetation is present in the central area of Brazil and borders other relevant biomes such as the Amazon to the north, the Caatinga to the northeast, the Pantanal to the southwest and the Atlantic Forest to the southeast.

This biome is considered one of the most threatened in terms of loss of original vegetation cover, according to the Action Plan for the Prevention and Control of Deforestation and Fire in the Cerrado (PPCERRADO), edited by the Ministry of the Environment (MMA 2011).

Despite being the second largest biome in the Brazilian territory, the Cerrado did not receive special treatment under the 1988 Constitution, as did the Atlantic Forest, the Mato-Grossense Pantanal, the Brazilian Amazon Forest, the Serra do Mar and the Coastal Zone, which were recognized as national heritages.

Although the Cerrado biome was not recognized by the Federal Constitution of 1988 as a national heritage, the Magna Carta imposed to the Public Power the obligation to define, in all Federation Units, the territorial spaces and their components to be specially protected. It also limited the alteration and suppression of these specially protected territorial spaces, which will only be permitted by law, prohibiting any use that compromises the integrity of the attributes that justify their protection.

With this command, it is understood that the States in which this type of vegetation exists are authorized to establish protection mechanisms for this biome. However, in some states there is a difference in treatment between the Cerrado and Atlantic Forest biomes, as in Minas Gerais and São Paulo.

The State of Minas Gerais enacted Law n°. 13,047 of 1998 (MINAS GERAIS, 1998), providing for the rational use of the primary native Cerrado or in a secondary stage of regeneration, declaring it susceptible to cutting or use for the production of charcoal, conditioned to the presentation of a management plan forestry and establishing a form of compensation for the use of vegetation.

The protection regulated by the State of Minas Gerais restricts a part of the Cerrado's native vegetation that must be preserved. In this case, for every 100 hectares authorized for intervention, at least 2% (two percent) of the authorized area must be preserved, since the exploration has as its purpose the alternative use of the soil for agriculture, as observed by reading of art. 2 of Law n°. 13,047, of 1998.

Unlike the State of Minas Gerais, the State of São Paulo issued a more protective norm and very similar to the treatment given to native vegetation inserted in the Atlantic Forest biome. The use and protection of the Cerrado biome in the State of São Paulo are regulated by Law nº. 13,550 of June 2, 2009, which provides for the use and protection of the native vegetation of the Cerrado biome of that State (SÃO PAULO, 2009).

The Law of the State of São Paulo nº 13,550 of 2009 prohibits the suppression of native vegetation in any of the physiognomies of the Cerrado biome when it shelters species of flora and wild fauna threatened with extinction and included in the categories regionally extinct (RE), critically endangered (CR), Endangered (EM) and Vulnerable (VU), as defined by the International Union for Conservation of Nature (IUCN).

There is also a prohibition when the vegetation plays the role of protecting springs and recharging aquifers; form corridors between remnants of primary or secondary vegetation in an advanced stage of regeneration; when it is located in an area surrounding an integral protection conservation unit and have a protective function for the biota of the protected area as defined in the management plan; have exceptional landscape value, recognized by the Government; and, when it is located in priority areas for conservation, preservation and creation of conservation units determined by official scientific studies or acts of the public power in specific regulations.

The suppression of vegetation in the medium and advanced stages of regeneration for the *cerradão* and *cerrado* “*stricto sensu*” physiognomies is authorized only on an exceptional basis, when necessary to carry out works, projects or activities of public utility or social interest. In addition, the inexistence of a technical and locational alternative for the intended purpose must be proved. If the intervention is authorized, the applicant must comply with the environmental compensation, preserving an area equivalent to four times the deforested area or recovering an area equivalent to four times the authorized area and in the same biome.

For the suppression of vegetation in the initial stage of regeneration for the *Cerradão* and *Cerrado* “*stricto sensu*” physiognomies and for the *Campo Cerrado* and *Campo* physiognomies, the São Paulo legislator determined the previous authorization of the competent environmental agency and other mitigation and compensation measures to be taken, as defined in the licensing processes.

Thus, given the absence of stricter protection for the Cerrado biome by some Brazilian states, such as the State of Minas Gerais, discussing the application of the norm dedicated to the Atlantic Forest becomes relevant when the native vegetation typical of the Atlantic Forest is located in the Cerrado biome.

The use and protection of the typica Atlantic Forest inserted em the Cerrado biome

Federal Law nº 11,428 of 2006, in its article 2, defines what can be considered as an Atlantic Forest biome for the purposes of applying the referred law:

Art. 2 For the purposes of this Law, the following native forest formations and associated ecosystems are considered to be part of the Atlantic Forest Biome, with the respective boundaries established in a map of the Brazilian Institute of Geography and Statistics - IBGE, in accordance with the regulations: Dense Ombrophilous Forest; Mixed Ombrophilous Forest, also called *Araucaria* Forest; Ombrophilous Open Forest; Seasonal Semideciduous Forest; and Seasonal Deciduous Forest, as well as mangroves, restinga vegetation, high altitude fields, inland swamps and forest enclaves in the Northeast. (See Decree No. 6,660, of 2008).

Single paragraph. **Only the remnants of native vegetation in the primary stage and in the initial, medium and advanced secondary stages of regeneration in the area defined in the caput of this article will have their use and conservation regulated by this Law.** It stands out.

The explanatory note that accompanies the map of the area of application of Federal Law nº. 11,428 of 2006 says that:

The vegetation typologies to which Law nº 11.428, of 2006 applies, are those that occur entirely in the Atlantic Forest Biome, as well as the existing plant disjunctions in the Brazilian Northeast or in other regions, when covered in specific CONAMA resolutions for each state.

The Federal Decree nº. 6,660 of November 2, 2008, which regulates provisions of Law nº. 11,428 of 2006, also clarifies the protection of the Atlantic Forest and corroborates this understanding, as seen below:

Art. 1 The map of the Brazilian Institute of Geography and Statistics - IBGE, provided in art. 2 of Law nº. 11,428 of December 22, 2006, contemplates the original configuration of the following native forest formations and associated ecosystems: Dense Ombrophilous Forest; Mixed Ombrophilous Forest, also called *Araucaria* Forest; Ombrophilous Open Forest; Seasonal Semideciduous Forest; Deciduous Seasonal Forest; altitude fields; areas of pioneer formations, known as mangroves, sandbanks, saline fields and alluvial areas; vegetation refuges; areas of ecological tension; inland swamps and forest enclaves, **represented by disjunctions** of Dense Ombrophylous Forest, Open Ombrophylous Forest, **Seasonal Semideciduous Forest** and Seasonal Deciduous Forest; steppe, savannah and savanna-steppe areas; and native vegetation of coastal and oceanic islands.

§ 1 Only the remnants of primary native vegetation and secondary native vegetation in the initial, medium, and advanced stages of regeneration in the area covered by the map defined in the caput will

have their use and conservation regulated by this Decree, **not interfering in areas already occupied with agriculture, cities, pastures and planted forests or other areas devoid of native vegetation.**

According to the Technical Manual of Brazilian Vegetation, edited by IBGE (2012, p. 148), vegetational disjunctions are:

Repetitions, on a smaller scale, of another type of nearby vegetation that falls within the context of the dominant phytoecological region. According to the cartographic scale that is being worked, an edaphic enclave considered as a community in transition (Ecological Tension), can be perfectly mapped as a disjoint community from the nearest climax. As classic examples of disjoint communities, two “ecologically disjointed vegetation” can be cited: one due to paleoclimatic influence, the disjunctions of the Mixed Forest located in the Mantiqueira and Bocaina Mountains; and another due to pedological influence, the Savanna (Cerrado) of the coastal tablelands of the Northeast Region and the valley of the Paraíba do Sul River.

In addition to the IBGE's explanatory note and the regulatory decree of the Atlantic Forest Law, the State of Minas Gerais, by Constitutional recommendation and in respect of the Atlantic Forest remnants of the State, has been giving special treatment to the Atlantic Forest, since the first editions of the Minas Gerais environmental regulations, whether it is inserted in the Cerrado biome or in its own biome.

The Constitution of the State of Minas Gerais (MINAS GERAIS, 1989) in its art. 214 provides the following:

Everyone has the right to an ecologically balanced environment, a good for common use by the people and essential to a healthy quality of life, and the State and the community have the duty to defend and preserve it for present and future generations.

§1 - To ensure the effectiveness of the right referred to in this article, the State is entrusted to, among other attributions: (...)

V - protect the fauna and flora, in order **to ensure the diversity of species and ecosystems** and the preservation of the genetic heritage, prohibited, in accordance with the law, practices that cause the extinction of species or subject animals to cruelty; (...)

IX - to establish, through a collegiate body, with the participation of civil society, regulatory and technical norms, standards and other measures of an operational nature, for the protection of the environment and control of the rational use of environmental resources; (...)

§ 7 - **Remnants of the Atlantic Forest**, the paths, the rocky fields, the caves, the remarkable landscapes and other units of relevant ecological interest **constitute environmental heritage of the State and their use will be made, in accordance with the law, under conditions that ensure their conservation.** Stands out.

The first forestry norm in Minas Gerais was the Forest Law nº 10,561 of 1991 (MINAS GERAIS, 1991) and thus had:

Art. 23 - **Vegetation cover** and other natural resources of ecosystems **specially protected under the terms of the State Constitution - remnants of the Atlantic Forest**, paths, caves, rupestrian fields, and areas of relevant ecological interest - **are subject to the protection established by law.**

§ 1 - The remnants of the Atlantic Forest, as defined by the government, may only be used through selective cutting, clear cutting is prohibited, using techniques and conditions that ensure their conservation and guarantee the stability and perpetuity of this ecosystem. Stands out.

Subsequently, Law nº. 14,309 of 2002 was edited (MINAS GERAIS, 2002), revoking the Forest Law nº 10,561 of 1991 and maintaining the same recommendations of the previous norm, in face of the Atlantic Forest remnants, as seen below.

Art. 30 Vegetation cover and other natural resources of the Atlantic Forest remnants, paths, caves, rocky fields, remarkable landscapes and other units of relevant ecological interest, ecosystems specially protected under the terms of § 7 of article 214 of the State Constitution, are subject to the conservation measures established by COPAM's deliberation.

§ 1º The remnants of the Atlantic Forest, as defined by the government, may only be used through techniques and conditions that ensure their conservation and guarantee the stability and perpetuity of this ecosystem.

In 2013, a new Forest Law in Minas Gerais is edited - Law nº 20,922 of 2013 - being clearer in face of the subject under discussion here, as it determines the protection of the Atlantic Forest biome, as well as its disjunctions, in compliance with the federal standard dedicated to the Atlantic Forest, as shown below.

Art. 57. Vegetation cover and other natural resources considered as environmental heritage under the terms of § 7 of art. 214 of the State Constitution are subject to the conservation measures established by Copam, without prejudice to the provisions of this Law and the pertinent legislation.

§ 1 **The conservation, protection, regeneration and use of the Atlantic Forest biome and its disjunctions in the State shall comply with the provisions of the pertinent federal legislation.**

DISCUSSION

For the discussion regarding the treatment given to the typical forest formations of the Atlantic Forest biome inserted in the Cerrado biome, there is no way to depart from the Federal Constitution of 1988. The basis of the studies is based on the importance of the Atlantic Forest recognized by the Brazilian constituent, hence the authorization of a constitutional nature so that this national heritage is, in fact, protected and conserved according to the regulation dedicated to the Atlantic Forest and not only when this forest formation is within a delimited space so that in it and only in it the vegetation grows and remains.

Also, because if the legislator's concern was with the area and not with the vegetation, it would not have excluded from protection the other areas covered by pasture, forestry and others, as registered in the sole paragraph of article 2 of Law nº. 11,428 of 2006, which regulates the use and protection of remnants of native vegetation only in the primary stage and in the initial, medium and advanced secondary stages of regeneration.

Even so, those States that have not edited stricter norms for the Cerrado biome, as the State of São Paulo did, have the duty to protect the remnants of the Atlantic Forest, even if they are inserted in the Cerrado biome or in other biomes.

The State of Minas Gerais, despite not having established stricter norms for the treatment of vegetation in the Cerrado biome, established stricter criteria for the disjunctions of the Atlantic Forest inserted in other biomes, according to the State Constitution of 1989.

It is with this thought in mind that the Minas Gerais legislator has been issuing norms for the use and protection of its forests, respecting the federal norm dedicated to the Atlantic Forest biome and its disjunctions, to protect the native vegetation typical of this biome, even when inserted in the Cerrado biome. This is because the vegetation is protected, whether or not it is included within the map published by the IBGE, since as the vegetation is typical, with the physiognomy and characteristics of the Atlantic Forest, the treatment given to it is imperative.

CONCLUSION

- In Brazilian territory, wherever the typical vegetation of the Atlantic Forest biome is, even if outside the area delimited by the IBGE map that was instituted to guide the application of Law nº 11,428 of 2006, native vegetation is subject to protective commands provided for in the infra-constitutional norm edited in compliance with CRF/88, since this larger Law reserved the Atlantic Forest and not only the biome, the status of national heritage and determined the public power and the community the duty to protect and conserve this environment, among others, for present and future generations.
- Therefore, it is understood that Law nº. 11,428 of 2006 applies to native vegetation fully inserted in the Atlantic Forest biome and as well as its existing plant disjunctions in the Brazilian northeast or in other regions of the national territory, notably by the strictest and most objective criteria for the analysis of requests for intervention in this typology.

REFERENCES

BRASIL. Constituição (1988). **Constituição da República Federativa do Brasil**, 1988. Brasília: Senado Federal, Centro Gráfico, 1988. 292 p.

BRASIL. Lei complementar nº 140, de 8 de dezembro de 2011. Fixa normas, nos termos dos incisos III, VI e VII do **caput** e do parágrafo único do art. 23 da Constituição Federal, para a cooperação entre a União, os Estados, o Distrito Federal e os Municípios nas ações administrativas decorrentes do exercício da competência comum relativas à proteção das paisagens naturais notáveis, à proteção do meio ambiente, ao combate à poluição em qualquer de suas formas e à preservação das florestas, da fauna e da flora; e altera a Lei nº 6.938, de 31 de agosto de 1981. **Diário Oficial da União**, Brasília, DF, nove de dezembro de 2011. Disponível em: <http://www.planalto.gov.br/ccivil_03/leis/lcp/lcp140.htm>. Acesso em: 08.1.2022.

BRASIL. Lei nº 9605, de 12 de fevereiro de 1998. Dispõe sobre as sanções penais e administrativas derivadas de condutas e atividades lesivas ao meio ambiente, e dá outras providências. **Diário Oficial da União**, Brasília, DF, treze de fevereiro de 1998. Disponível em: <http://www.planalto.gov.br/ccivil_03/leis/19605.htm>. Acesso em: 08.1.2022.

BRASIL. Lei nº. 11.428, de 22 de dezembro de 2006. Dispõe sobre a utilização e proteção da vegetação nativa do bioma mata atlântica, e dá outras providências. **Diário Oficial da União**, Brasília, DF, vinte e seis de dezembro de 2006. Disponível em: <http://www.planalto.gov.br/ccivil_03/_ato2004-2006/2006/lei/11428.htm>. Acesso em: 08.1.2022.

BRASIL. Decreto nº 6.660, de 21 de novembro de 2008. Regulamenta dispositivos da Lei nº 11.428, de 22 de

dezembro de 2006, que dispõe sobre a utilização e proteção da vegetação nativa do bioma mata atlântica. **Diário Oficial da União**, Brasília, DF, treze de fevereiro de 1998. Disponível em: http://www.planalto.gov.br/ccivil_03/_ato2007-010/2008/decreto/d6660.htm#:~:text=DECRETO%20N%C2%BA%206.660%2C%20DE%201,nativa%20do%20Bioma%20Mata%20Atl%C3%A2ntica. Acesso em: 08.1.2022.

INSTITUTO NACIONAL DE PESQUISAS ESPACIAIS (INPE); SOS MATA ATLÂNTICA. Atlas dos remanescentes florestais da mata atlântica período 2018-2019. Relatório Técnico: 2020. Disponível em: <http://mapas.sosma.org.br/site_media/download/2020_Atlas_Mata_Atlantica_2018-2019_relatorio_tecnico_final.pdf>. Acesso em: 10 out. 2020.

INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA (IBGE). **Mapa da área de aplicação da lei nº. 11.428, de 22 de dezembro de 2006**. Brasília: IBGE, 2004. 2 mapas, color. Escala: 1:5. 000.000. Disponível em:<http://geoftp.ibge.gov.br/informacoes_ambientais/estudos_ambientais/biomas/mapas/lei11428_mata_atlantica.pdf>. Acesso em: 08 jan. 2019.

INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA (IBGE). **Manual técnico da vegetação brasileira**. 2. Ed. Brasília: 2012. Disponível em: <<https://biblioteca.ibge.gov.br/visualizacao/livros/liv63011.pdf>>. Acesso em: 08 jan. 2019.

INSTITUTO BRASILEIRO DE GEOGRAFIA E ESTATÍSTICA (IBGE). **Manual técnico da vegetação brasileira**: sistema fitogeográfico, inventário das formações florestais e campestres, técnicas e manejo de coleções botânicas, procedimentos para mapeamentos. Rio de Janeiro: IBGE- Diretoria de Geociências, 2012. 271 p.

MARINO, Marilza., FURTADO, João S., e VUONO, Yara S.. Glossário de Termos Usuais de Ecologia. 1ª ed. São Paulo, Academia de Ciências do Estado de São Paulo/ Secretaria de Indústria, Comércio, Ciência e Tecnologia, 1980, p. 18.

MEDEIROS, João de Deus. Guia de campo: vegetação do Cerrado 500 espécies / João de Deus Medeiros. – Brasília: MMA/SBF, 2011. 532 p.

MINAS GERAIS. Constituição do estado (1989). **Diário Oficial de Minas Gerais**. Belo Horizonte: ALMG, 1989. 276 p.

MINAS GERAIS. Lei nº. 10.561, de 27 de dezembro de 1991. Dispõe sobre a política florestal no Estado de Minas Gerais. **Diário Oficial de Minas Gerais**. Belo Horizonte: ALMG, vinte e oito de dezembro de 1991. Disponível em: <https://www.almg.gov.br/consulte/legislacao/completa/completa.html?tipo=LEI&num=10561&comp=&ano=1991&aba=js_textoOriginal#texto>. Acesso em: 08.1.2022.

MINAS GERAIS. Lei nº.13.047, de 2 de dezembro de 1998. Dispõe sobre o uso racional do cerrado nativo ou em estágio secundário de regeneração. **Diário Oficial de Minas Gerais**. Belo Horizonte: ALMG, dezoito de dezembro de 1998. Disponível em: <https://www.almg.gov.br/consulte/legislacao/completa/completa.html?tipo=LEI&num=13047&comp=&ano=1998&aba=js_textoOriginal#texto>. Acesso em: 08.1.2022

MINAS GERAIS. Lei nº. 14.309, de 19 de junho de 2002. Dispõe sobre as políticas florestal e de proteção à biodiversidade no Estado. **Diário Oficial de Minas Gerais**. Belo Horizonte: ALMG, vinte de junho de 2002. Disponível em: <<https://www.almg.gov.br/consulte/legislacao/completa/completa.html?tipo=LEI&num=14309&comp=&ano=2002>>. Acesso em: 08.1.2022.

MINAS GERAIS. Lei nº. 20.922, de 16 de outubro de 2013. Dispõe sobre as políticas florestal e de proteção à biodiversidade no Estado. **Diário Oficial de Minas Gerais**. Belo Horizonte: ALMG, dezessete de outubro de 2013. Disponível em: <<https://www.almg.gov.br/consulte/legislacao/completa/completa-nova-min.html?tipo=LEI&num=20922&comp=&ano=2013&texto=consolidado#texto>>. Acesso em: 08.1.2022.

MINISTÉRIO DO MEIO AMBIENTE. **Plano de ação para prevenção e controle do desmatamento e das queimadas: cerrado**. Brasília: MMA, 2011. 200 p.

SÃO PAULO. Lei nº. 13.550, de 02 de junho de 2009. Dispõe sobre a utilização e proteção da vegetação nativa do Bioma Cerrado no Estado. **Diário Oficial de Minas Gerais**. São Paulo. ALSP, dois de junho de 2009. Disponível em:<<https://www.al.sp.gov.br/repositorio/legislacao/lei/2009/lei-13550-02.06.2009.html>>. Acesso em: 08.1.2022.