Title:	**Genetically Modified Tree Policy**		
Issued by:	**Technology and Innovation, Sustainability and Institutional Affairs**	**Date:**	**18/06/2021**
Code:	**POL.00.0044**	**Revision:**	

Contents

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1 PURPOSE

1.1

Describe the principles, commitments and initiatives applied to Suzano S.A.'s research, development and deployment of genetically modified (GM) trees, including its own work and/or work carried out in partnership with third parties. Suzano acknowledges the terms Genetically Modified (GM) and Genetically Engineered (GE) are both widely used in the public domain and essentially have the same meaning (see 3.8: activity to modify, in a controlled manner, the genetic information of an organism integrating an exogenous DNA in its genome).

1.2

This Policy also describes the guidelines for governance, relationships and communication with internal and external stakeholders on all matters related to GM Trees.

1.3

This Policy, through its Principles and Commitments (4.1) provides a Governance framework to ensure transparency and verification of its GM Tree stewardship program with the following intended outcomes and impacts:

- Legality;
- Scientific progress through ethical decision-making;
- Gold standard in responsible plantation management;
- Integration of novel traits that are not present in natural populations of *Eucalyptus,* into Suzano conventional tree breeding program, aligned to the company's Innovability (3.11) commitments.
- Community empowerment and resilience through Shared Value (3.15) creation;
- Opportunities to contribute to food security
- Increase forest resilience.
- Open communication on ethics, safeguards, assurances and stewardship with stakeholders;
- Clarification of controversies that motivate scepticism of stakeholders, sharing knowledge and providing a factual, scientific basis for decision making.

2 REFERENCE DOCUMENTS

- Human Rights Policy of Suzano S.A.
- Wood procurement Policy of Suzano S.A.
- Corporate Environmental Policy of Suzano S.A.
- Stakeholder relationship policy of Suzano S.A.
- Code of conduct of Suzano S.A.
- FSC-STD-40-004 v.3.0 – FSC® Forest Stewardship Council Chain of Custody Standard
- FSC-STD-01-001 v.5.0 – Principles and Criteria of the FSC® Forest Stewardship Council Standard
- FSC-POL-01-004 v.2.0 – Policy for the Association of Organizations with FSC®
- ABNT NBR 14790 – Sustainable Forest Management – Chain of Custody – Requirements - CERFLOR
- ABNT NBR 14789 – Forest Management – Principles, criteria and indicators for planted forests – CERFLOR
- ISO 38200 Chain of custody of wood and wood-based products

Note: Policies and protocols to ensure the trait (3.17) development program success, legal compliance, traceability and verification are listed in Annex 1.

3 TERMS, DEFINITIONS AND ABBREVIATIONS

3.1 Biosafety

Procedures undertaken to measure, avoid, mitigate or control potential risks to human and animal health, the environment or biodiversity which may result from the development and use of chemical, physical and/or biological agents.

3.2 Cartagena Protocol on Biosafety

International agreement to the UN Convention on Biological Diversity which aims to ensure the safe handling, transport and use of living modified organisms (LMOs) resulting from modern biotechnology that may have adverse effects on biological diversity, taking also into account risks to human health.

Source: UN Convention on Biological Diversity.

3.3 Classical breeding
Science to increase the frequency of favorable alleles (different forms of a gene) in individuals within a population, by crosses between selected parents to generate varieties or clones with the desired traits (such as yield enhancement and better adaptability to environmental conditions).

3.4 Biosafety Quality Certificate (CQB)
Certificate issued by the National Technical Biosafety Commission (CTNBio) (3.5) required for all institutions that intend to carry out research in laboratory, greenhouse or field, as part of the process of obtaining commercial approval of GMOs or evaluating the biosafety of GMOs, which includes, the experimental scope, facilities, cultivation, handling, transportation, movement, import, export, storage, field release and disposal of GMOs. It is necessary to establish an Internal Biosafety Commission (CIBio), with members who have technical knowledge and/or proven experience in research, which must be approved by CTNBio. CIBio has a fundamental role in the surveillance and monitoring of the transportation, production and handling activities with GMOs, and is responsible for ensuring the biosafety compliance the rules.

Note: CQB is a Certificado de Qualidade em Biossegurança, in Portuguese.

3.5 Brazilian National Biosafety Commission (CTNBio)
CTNBio is a multidisciplinary collegiate body, created by Law Nº. 11.105, of March 24, 2005, with the main objective to provide technical advisory support and advice to the Federal Government in the formulation, implementation and updating of the National Biosafety Policy on GMOs (3.9), as well as the establishment of technical safety standards and technical advice relating to the protection of human health, living organisms and the environment, for activities involving the construction, testing, cultivation, handling, transporting, marketing, consumption, storage, release and disposal of GMOs and their derivatives[1].

3.6 FSC®(FSC-C010014)
Forest Stewardship Council®

[1] In order to assure that civil society is represented in the decisions regarding commercial use of GMOs in Brazil, CTNBio's composition, as defined by the law, convenes 27 full members, with a further 27 substitutes, as follows: 3 specialists in human health, 3 specialists in animal health, 3 plant specialists, 3 environment specialists, 1 family agriculture specialist, 1 consumers' rights specialist, 1 biotechnology specialist, 1 workers' health specialist, 1 environment specialist, 1 health specialist, 1 representative each from the Ministries of Science and Technology, Ministry of Agriculture, Ministry of Environment, Ministry of Health, Ministry of Agrarian Development, Ministry of Industry, Ministry of Justice, Ministry of Defence, Ministry of External Relations and the Presidency Special Secretariat for Aquaculture and Fisheries. All CTNBio members must have a doctorate degree or equivalent and they meet monthly, 10 times a year. Each member, full or substitute, is named for a 2-year term, which can be renewed a maximum of twice. All CTNBio meetings are recorded and the minutes are publicly available.

3.7 Gene Editing
Part of the New Breeding Techniques (NBT) for plant improvement. Such technologies consist of the application of different molecular biology techniques to induce site-directed mutation, resulting in an individual without recombinant DNA, such as ZFN (Zinc Finger Nucleases), TALENs (Transcription Activator–like Effector Nucleases) and more recently CRISPR (Clustered Regularly Interspaced Short Palindromic Repeats). These highly specific and precise changes in the nucleotide sequence affect the expression of selected genes resulting in phenotypic changes in the organism.

3.8 Genetic Modification (GM),
Processes of modifying in a controlled manner, the genetic content of an organism integrating exogenous DNA into its genome.

Source: EC Directive 2001/18/EC, Annex 1A.

It is accepted that "genetically modified" (GM) has the same meaning as "genetically engineered" (GE) for all purposes of this policy.

3.9 Genetically Modified Organism (GMO)
A genetically modified organism whose DNA/RNA genetic material has been modified by any genetic engineering technique.

Source: CTNBio

Or:

An organism, with the exception of human beings, in which the genetic material has been altered in a way that does not occur naturally by mating and/or natural recombination.

Source: EC Directive 2001/18/EC.

3.10 GM Tree Stewardship Program
The program developed by Suzano employed to responsibly manage and govern the discovery, characterization, development and deployment of genetically modified and gene edited trees (GM Trees), and communications thereon.

3.11 Innovability
The integration of scientific and technological innovation with sustainability objectives based on dialogue with stakeholders on the principle of Shared Value (3.15) and on an understanding of direct and indirect environmental impacts and dependencies.

3.12 Outgrower
A rural producer (including small holders) with whom Suzano has a relationship for the supply of wood into its operations and to whom Suzano provides operational support.

3.13 Polymerase Chain Reaction (PCR)
PCR is a laboratory technique used in molecular biology, based on DNA replication that occurs in vivo, to amplify a specific DNA segment in a specific way. This amplification enables analysis to verify the presence or absence of DNA sequences, such as a gene inserted into an organism's genome through genetic transformation.

3.14 PEFC
Programme for the Endorsement of Forest Certification.

3.15 Shared Value
Policies and operating practices that enhance the competitiveness of a company while simultaneously advancing the economic and social conditions in the communities in which it operates. Shared value creation focusses on identifying and expanding the connections between societal and economic progress by creating economic value in ways that also creates value for society by addressing its needs and challenges. At the core of successful shared value strategies is the need to develop a virtuous cycle by which the company increases profit by helping to solve societal challenges.

Source: Creating shared value (2011). Michael E. Porter and Mark R. Kramer. Harvard Business Review.

3.16 Sustainable Intensification (of productivity)
Suzano defines sustainable intensification of plantation productivity as “Practical measures to intensify forest productivity in a manner that co-creates shared value, resilience, community empowerment and environmental health in the face of accelerated global change.

3.17 Trait
Quantitative or qualitative character of a plant variety determined by a gene or combination of genes.

3.18 Plantation Value Chain
Tree plantation program of Suzano including in-house plantations and plantations managed by Outgrowers (3.12) and other providers of wood.

3.19 ISO
International Organization for Standardization.

4 GUIDELINES

4.1 Principles

This Policy is based on the following principles and commitments which govern Suzano's GM Tree Stewardship program and relationships with stakeholders on this matter.

Principle 1: A scientific and operational framework to ensure all projects provide solutions that enable not only the transformation of the economic values of forestry but also create social shared value and environmental renewal and resilience;

Principle 2: A bioethical framework to ensure decisions shall be based on dialogue with stakeholders, on the principle of shared value (3.15) and on an understanding of direct and indirect environmental impacts and dependencies[2].

Our pledge to Principle 1 is implemented through the following commitments:

- Operate in compliance with all applicable national and international laws, conventions and protocols;
- Undertake scientific progress through ethical decision-making processes;
- Maintain meticulous biosafety risk assessment, management and stewardship processes
- Act proactively to eliminate or mitigate potential negative environmental, social and commercial impacts.

Our pledge to Principle 2 is implemented through the following commitments:

- Ensure transparency, stewardship and traceability good practices within all operations;
- Stimulate long-term, outcome-oriented, local and global, inclusive dialogues on tree biotechnology;
- Promote technology transfer for humanitarian or environmental purposes;
- Align diligently all initiatives with opportunities to share benefits with Outgrowers.

[2] Dependencies include stocks of natural resources such as water, biodiversity, air, cycles of natural resources like carbon, minerals and soil. Dependencies also include abiotic flows such as wind and solar energy.

- Implement an advisory committee to identify and define technical, scientific and bioethical questions about the social, environmental, economic and legal aspects of biotechnology and its applications.

4.2 Governance and Ethics

All processes are governed by the legal framework of the territories in which Suzano operates. Governance of any action under the GM tree program is a). initiated at the stage of project evaluation by the Internal Biosafety Commission (CIBio) (see 4.3.1.2.1); b). subject to the guidance provided by the Advisory Committee (4.2.1); and c). reviewed and approved by the Technology and Innovation Executive Director.

4.2.1 Advisory Committee

4.2.1.1 Purpose

Suzano recognizes its responsibility to address the diversity of ethical concerns related to this technology and to encourage a better internal and external understanding of such concerns through dialogue with communities, academia, governmental and non-governmental organizations.

Dialogue will support the development of the Suzano GM Tree Stewardship program and help to ensure effective and responsible actions that are in harmony with societal values.

To facilitate this process, Suzano has established an Advisory Committee.

4.2.1.2 Responsibilities

Advisory Committee Members responsibilities include:

1. To identify and define technical, scientific and bioethical questions about the social, environmental, economic and legal aspects of biotechnology and its applications raised by recent advances in the field in order to respond and, whenever possible, anticipate public concerns.

2. To review research and development within the Suzano GM Tree Stewardship program to ensure commitment to high ethical standards, as well as the use of safe and effective products by identifying and considering the ethical and social implications of the work of Suzano in this field including:

    - Issues of public health and environmental protection and biodiversity;
    - The public interest and the guarantee of consumer choice and public confidence;
    - Issues of access and benefit sharing;
    - Opportunities to make available advances made in Suzano's GM Tree Stewardship Program for humanitarian or forest health purposes.

3. To support the design and implementation of safeguards to ensure that the Suzano GM Tree Stewardship program respects fundamental Environmental, Social and Governance values.

4. To periodically review developments on the GM plants and their impacts and to encourage dialogue on such questions with a view to promoting internal and external understanding.

5. To encourage Suzano to communicate and share timely and appropriate information about its GM Tree program in an accurate and balanced manner.

6. To support periodic review of the Strategic Positioning of Suzano's GM Tree Stewardship Program.

4.2.1.3 Composition and term of membership

The Advisory Committee shall be composed of eminent personalities from relevant backgrounds to provide a mix of requisite expertise. The functions of the members shall be for a two-year term with the possibility of renewal for a second two-year term. The Chairmanship of the Advisory Committee shall be for a two-year term. Suzano shall provide the Secretariat for the committee.

4.2.1.4 Terms and selection

Initial members of the Advisory Committee shall be selected by Suzano and shall serve in their individual capacity. At its second physical meeting, the Committee shall review its composition,

making recommendations for additions or modifications, when necessary and new members will be appointed to the Advisory Committee, as necessary.

4.2.1.5 *Modus Operandi*

Each year the Advisory Committee will hold not more than two physical meetings and at least two teleconferences to review the progress of the work, address strategic questions, risks and opportunities and plan for the coming year. Extraordinary meetings may be scheduled at the Group's discretion as particular issues arise.

The Advisory Committee will take decisions based on majority agreement.

4.2.1.6 Permanence

These terms of reference may be modified from time-to-time by Suzano to address new issues and new insights.

4.3 What We Do

Our GM Tree Stewardship Program is performed under the governance framework described in 4.2, which ensures the utmost diligence and compliance with the principles of this Policy. All Suzano staff participating in the GM Tree Stewardship Program are trained in the content of this Policy. We describe the reasoning behind the decision of Suzano to initiate and develop a GM Tree Stewardship Program in Annex 1.

4.3.1 Activities under principle 1

All activities shall be developed to ensure all projects provide solutions that enable not only the transformation of the economic values of forestry but also create social shared value and environmental renewal and resilience.

4.3.1.1 Governance of the GM Tree Stewardship Program

Suzano has established a Governance framework (4.2) to oversee our GM Tree Stewardship Program to deliver on the pledges of the Commitments to Principle 1:

- Operate in compliance with all applicable national and international laws, conventions and protocols;
- Undertake scientific progress through ethical decision-making processes;
- Maintain meticulous biosafety risk assessment, management and stewardship processes
- Act proactively to eliminate or mitigate potential negative environmental, social and commercial impacts.

4.3.1.2 Research and Development

4.3.1.2.1 Project Concept

Any new project concept, whether internally or externally originated, prior to adoption, is subject to a previous analysis and approval by the Internal Biosafety Commission (CIBio, see 3.4).The Commission is responsible for evaluating the project, including criteria related to scientific merit, regulatory and public affairs assessment, freedom-to-operate analysis inter alia.

4.3.1.2.2 Legal compliance with Biosafety Law

In compliance with Biosafety Laws, our research is carried out in laboratory, greenhouses and field facilities accredited with CQB granted by CTNBio. All these facilities are inspected routinely by the CIBio and audit by Ministry of Agriculture, Livestock and Supply (MAPA) and the Brazilian Ministry of Environment (IBAMA). All activities developed by Suzano with under its GM Tree Stewardship Program are approved and annually reported by CTNBio.

Furthermore, our laboratories are recognized by Good Laboratory Practice (GLP) by INMETRO regarding the molecular processes for the characterization of genetically modified organisms.

Verification of our compliance under national biosafety regulations is covered during official audits by statutory bodies. In addition, during sustainable forest management and chain of custody audits, the traceability and control processes to avoid non-intentional uses of GM material are assessed. All field releases are regulated and regularly inspected by the MAPA and IBAMA. The inspection of each specific plantation experiment is made immediately after the installation, and periodically during its development. MAPA also has the responsibility of inspecting commercial plantings of crops (including trees) that have been the subject of experimental field releases authorized by CTNBio and is authorized to collect samples of these materials at random, to check that there is no illegal and unauthorized commercial planting of GM Trees.

The science-based process for seeking commercial approval of a GM Tree is based on scientific criteria, and clearly defined by CTNBio Normative which involves many years of laboratory, greenhouse and field testing under CQB license. Candidate clones which show promising characteristics in these tests are selected for "Event Selection Trials" in the field under a request for planned field release (LPMAs[3]) approved by CTNBio. From these trials, the best candidate is selected to initiate the regulatory trials. Regulatory assays are carried out at several locations under specific protocols to generate biosafety data of the best candidate to establish the risk to human, animal health and environmental impact according to CTNBio's guidelines. Data on the biosafety of the GM tree is collected from field, greenhouse and laboratory studies. The dossier comprising this data is compiled and submitted to CTNBio for assessment. The dossier, as well as the technical opinion of CTNBio, is publicly available after submission.

4.3.1.2.3 Intellectual Property (IP)

As with any other technology developed by the Company, Suzano seeks to secure intellectual property rights in line with its competitive innovation strategy. The purpose of Intellectual property is to differentiate from competitors, not to stop access to technology.

All new technologies, including GM technologies, undergo a stringent intellectual property analysis prior to introduction into the Company's R&D pipeline. This analysis, which may be conducted by in-house intellectual property professionals or by outside council is aimed at determining the freedom-to-operate (FTO) under the technology i.e. to ensure that such technology and its use in GM Eucalyptus in Brazil, and in certain cases Worldwide, would not infringe a third party's valid IP assets, as well as the patentability of such technology. In cases where it is determined that such use is or will potentially be protected by third party IP, the company may endeavor to obtain rights to use such assets or on the other hand may abandon the project.

New varieties developed by the insertion of novel genes will be protected in accordance with local law through plant variety protection (PVP) as with any unique variety or by patenting if applicable.

4.3.2 Activities under Principle 2

[3] LPMAs Planned Field Release (Liberação Planejada no Meio Ambiente – LPMA – in Portuguese).

Decisions shall be based on dialogue with stakeholders, on the principle of shared value (3.15) and on an understanding of direct and indirect environmental impacts and dependencies.

Under the Governance framework described in 4.2 and the guidance of the Advisory Committee (4.2.1), Suzano undertakes specific activities designed to deliver on the pledges of Principle 2:

- Ensure transparency, stewardship and traceability good practices within all operations;
- Stimulate long-term, outcome-oriented, local and global, inclusive dialogues on tree biotechnology;
- Promote technology transfer for humanitarian or environmental purposes;
- Align diligently all initiatives with opportunities to share benefits with Outgrowers.

4.3.2.1 Transparency, Stewardship and Traceability

In Brazil, by law, all submissions, actions, approvals and decisions undertaken under biosafety and verification rules of CTNBio are in the public domain, with the exception of confidential information that can be requested and analyzed by CTNBio involving industrial secrets and competitive advantages.

Suzano has a commitment to public engagement and regularly makes presentations on our GM Tree Stewardship Program worldwide.

With the intent of clarifying our purpose and operations, Suzano has a commitment to openly engage with civil society through the organization of guided visits and workshops at our research facilities and field trial locations.

Traceability is managed through a system of bar-coding. The event is tracked from its generation in the Tissue Culture Laboratory to field planting and all subsequent manipulations.

Any future decision to deploy GM Trees will be made under conditions which will ensure segregation of materials and adherence to chain of custody standards (see section 4.3.3).

4.3.2.2 Global and inclusive dialogues on Tree Biotechnology

Suzano acknowledges that for some stakeholders the topic of GM Trees is controversial and that there exists skepticism related to unknown risks. Suzano also acknowledges the restrictions of FSC and PEFC on commercial planting of GM Trees. For these reasons, Suzano commits to participate in and promote science-based, long-term inclusive dialogue on the topic to raise awareness and incorporate diverse viewpoints into its decision-making processes.

Suzano is committed to providing access for interested stakeholders to visit its research and development facilities (labs, greenhouse and field trials) with the purpose of sharing perspectives on the development and deployment of GM Trees.

Outcomes of such dialogues will be used where possible to guide decisions on scientific and technological research and development of the company.

4.3.2.3 Technology transfer for humanitarian or environmental purposes

Suzano commits to guaranteeing access to and use of technologies and information arising from its GM Tree Stewardship program free of charge to public sector research institutes working on the improvement of subsistence crops for *food security* or institutes developing strategies for *safeguarding forest health*.

Examples of such partnerships and relations are listed in Annex 4.

4.3.2.4 Shared Value along the Plantation Value Chain

Suzano sources a proportion of its wood from Outgrowers (including smallholders), representing several thousand farmers. After adoption of this technology under different environmental conditions and performance in large scale, Suzano has committed that the GM Trees under development would be made available for planting by Outgrowers as well as in the company's own plantations. This will be done under similar arrangements as for existing proprietary non-GM varieties. Thus, our Outgrowers will have access to our novel materials, as they currently do to other clones developed by Suzano, at no additional technology access cost.
Trees with high yield, better resistance to pests and diseases, herbicide tolerance and higher resistance to stress should bring better economic, environmental and social benefits to people

involved in their cultivation. The details of appropriate benefit sharing schemes would be established up-front during the consultation process with the communities in which the plantations will be deployed, as they are currently when new, better performing varieties are introduced into a community. Suzano operates in a competitive environment and has to work hard to attract local communities to work alongside it. The company has competitors who compete for the same skills from the same communities in all the regions in which it operates – and this serves as an additional stimulus to maintain attention on community relations.

4.3.2.5 Relationships

Suzano's relationship strategy seeks to ensure the social legitimacy of its business by strengthening its long-term interaction with surrounding communities and other stakeholders and by integrating their interests in the management of our forestry operations.

As such, through dialogue and structured engagement processes, we interact with internal, national and international stakeholders and build relationship networks that enable us to understand and incorporate social and environmental information into the corporate decision-making process. By doing so, we can ensure the recognition and respect of rights, as well as social and cultural values of indigenous peoples, traditional and local communities, as well as people involved in their own management operations or those of suppliers and clients.

The Company has a structured process to receive, register, evaluate, answer and monitor all reports from stakeholders related to its operations and products, such as complaints, doubts, compliments, suggestions, opinions and others matters, through the call center 0800 022 1727 or by e-mail: suzanoresponde@suzano.com.br. SISPART is the system to register and monitor the reports received from stakeholders.

4.3.3 Decisions on commercial deployment

Suzano does not currently deploy GM Trees in its commercial operations. A decision to deploy such trees will be made in consultation and communication with stakeholders. Any such deployment will be made under conditions which will ensure segregation and traceability of materials through a Stewarded Material program. Furthermore, should such deployment occur, material from such trees would not be present in products for at least five to six (5-6) years from the date of planting.

5 RESPONSIBILITIES

The Technology and Innovation, Sustainability and Institutional Affairs areas of Suzano are responsible for the content, revision, implementation and dissemination of this Policy.

6 APPROVAL OF THE POLICY

This Policy is valid for an indefinite period, starting at the date of its approval by the Board of Executive Officers of Suzano S.A.

The Board of Executive Officers of Suzano S.A. has the sole power to amend this Policy under whatever circumstance.

Note1: if necessary, copies of decisions about changes or revision of this Policy may be sent to stakeholders.

7 VIOLATION OF THE POLICY

Any violation of this Policy must be reported through the confidential Ombudsman channel and handled in accordance with the Code of Conduct of Suzano S.A.

- Telephone in Brazil: 0800 771 4060
- Telephones abroad: check the specific number on the website
- E-mail: ouvidoriaexterna@austernet.com.br
- Website: www.suzano.com.br, click on "Ombudsman"

8 ANNEXES

ANNEX 1 Why genetic modification and GM Trees?

The genetic gains provided through classical methods of eucalyptus improvement remain important and are based on the natural genetic variability of the genus *Eucalyptus*. Classical methods of eucalyptus breeding have been responsible for considerable gains in plantation productivity since our tree breeding program was initiated 40 (forty) years ago and continue to be a focus of Suzano's forestry research operations.

The enhancement of yield by classical breeding is governed by inherent genetic limitations and thus improvement is subject to diminishing returns with time. In fact, yield gains obtained through classical breeding of Eucalyptus in Brazil have begun to plateau in recent years due to such inherent genetic factors, as well as biotic and abiotic pressures on commercial materials. Yield enhancement through genetic modification is an opportunity to overcome these barriers, allowing the sustainable intensification of productivity.

Furthermore, for some specific breeding objectives, the natural genetic variability does not provide solutions. For example, genes to imbue protection against pest and diseases may not be present in eucalyptus germplasm. Thus, a GM approach to the question of forest health may be the only realistic option, as alleles for disease and pest resistance may not be found within related species and thus cannot be introduced via classical breeding.

Genetic modification provides a specific means for enhancing agronomic traits in plant species. Suzano views genetic modification of trees as an extension and support of classical breeding programs, affording the ability to enhance and protect yield and to modify wood properties in a sustainable manner.

New Gene Editing technologies, sometimes referred to as New Breeding Techniques (NBT), have emerged in recent years. Suzano is pursuing research in this area to understand how these technologies may be employed for further improvement of our plantations.

ANNEX 2 List of relationships with public sector research institutes to which technologies have been shared.

1. Bala P. Venkata, B. P; Polzin R., Wilkes R.; Fearn A; Blumenthal D.; Rohrbough S.; Taylor N. J. (Donald Danforth Plant Science Center, St. Louis, MO, United States). Heterologous Overexpression of Arabidopsis cel1 Enhances Grain Yield, Biomass and Early Maturity in Setaria viridis. Frontiers in Plant Science | www.frontiersin.org, November 2020 | Volume 11 | Article 515078.

ANNEX 3 List of national and international laws

- Brazilian Law No. 11,105, of March 24, 2005,
- Decree No. 5,705, of February 16, 2006.
- Biosafety Quality Certificate (CQB), including the Biosafety Internal Commission (CIBio), granted and approved by CTNBio – CTNBio Normative Resolution No. 01, 20/06/2006.
- Cartagena Protocol on Biosafety to the Convention of the Parties on Biological Diversity (CBD) in view of the provisions of Brazilian Law No. 11,105, of March 24, 2005, and Decree No. 5,705, of February 16, 2006.
- CBD Article 8 (g) Decision IX/5 (1) of CBD COP9.[4]
- INMETRO - Good Laboratory Practice (GLP) recognition of FuturaGene Itapetininga Molecular Biology Laboratory (BPL 0040) facility for molecular studies with GMOs.

[4] CBD Article 8 (g) Decision IX/5 (1) of CBD COP9
(r). Reaffirm the need to take a precautionary approach when addressing the issue of genetically modified trees;
(s). Authorize the release of genetically modified trees only after completion of studies in containment, including in greenhouse and confined field trials, in accordance with national legislation where existent, addressing long–term effects as well as thorough, comprehensive, science-based and transparent risk assessments to avoid possible negative environmental impacts on forest biological diversity;
(t). Also consider the potential socio-economic impacts of genetically modified trees as well as their potential impact on the livelihoods of indigenous and local communities;
(u). Acknowledge the entitlement of Parties, in accordance with their domestic legislation, to suspend the release of genetically modified trees, in particular where risk assessment so advises or where adequate capacities to undertake such assessment is not available;
(v). Further engage to develop risk-assessment criteria specifically for genetically modified trees;
(w). Note the results of the Norway – Canada Workshops on Risk Assessment for emerging applications for Living Modified Organisms (UNEP/CBD/BS/COP-MOP/4/INF/13);
(x). Welcome the decision of the fourth meeting of the Conference of the Parties serving as the meeting of the Parties to the Cartagena Protocol to establish an Ad Hoc Technical Expert Group on Risk Assessment and Risk Management that is also mandated to address the issue of genetically modified trees;
(y). Collaborate with relevant organizations on guidance for risk assessment of genetically modified trees and guidance addressing potential negative and positive environmental and socio - economic impacts on the conservation and sustainable use of forest biodiversity associated with the use of genetically modified trees;
(z). Provide the available information and the scientific evidence regarding the overall effects of genetically modified trees on the conservation and sustainable use of biological diversity to the Executive Secretary for dissemination through the clearing-house mechanism;