

Legal research on the validity of concerns  
raised on the protection of plants and  
plant material as a result of the Colombia  
free trade agreement with the United  
States

# Colombia: Stricter legal protection of plants and plant material caused by the FTA with the United States?

MSc Thesis

Claire Molkenboer

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**Colombia: Stricter legal protection of plants and plant material caused  
by the FTA with the Unites States?**

*Legal research on the validity of concerns raised on the protection of plants and  
plant material as a result of the Colombia free trade agreement with the United  
States*

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Thesis for the department Law and Governance submitted in partial fulfilment of the degree  
of Master of Science in Food Safety at the Wageningen University, the Netherlands.

**Claire Danique Molkenboer**

**February 2015**

**Supervisors:**

**Dr. H. Schebesta**

**Dr. B. de Jonge**

## Abstract

Researchers are afraid of the impact FTAs and especially TRIPs-plus provisions will have on developing countries. The documentary by Solano and Cartolano and the article by GRAIN demonstrated the effects of protection of plants and plant material on Colombian farmers as a result of the United States-Colombia Trade Promotion Agreement. The aim of this research is to gain more insights in the development of regulations on protection of plants and plant material in place in Colombia which might influence Colombian farmers, in order to create a better understanding whether the concerns raised on the FTA regarding the impact on Colombian farmers are correct. The research has shown the FTA contains TRIPs-Plus provisions regarding plants and plant material protection; especially regarding enforcement and plant breeders' rights. However, before the FTA was signed the national regulations were already as strict or stricter on many levels than is required by the FTA with regard to enforcement, protection of plant breeders' rights and in addition Colombia implemented a seed certification system, limiting the use of farm-saved seeds. Therefore the claims made in the documentary and by GRAIN are not well grounded and lack relevant national regulations which should not be underestimated in their potential impact.

**Keywords:** United States-Colombia Trade Promotion Agreement (FTA), patents, plant breeders' rights, UPOV 1991 Convention, seed certification.

## Acknowledgement

Now the thesis is finished and lies in front of you, it is time to look back at the process and thank the patient people who helped me during the process. Writing a thesis is exciting but often also leads to uncertainties and frustrations. Sometimes you get stuck because you lose focus or the other way around because you are too focussed and you can't see the whole picture anymore. Both ways you need people you guide you through it, help you to stay on track and don't lose your focus.

First of all, I would like to thank my supervisors Hanna Schebesta and Bram de Jonge of the Wageningen University. Both are living (partly) abroad but always found time to guide me through when I was struggling with the research questions, legal texts, definitions and other confusing elements I came across during my research. The meetings, which often were via Skype, always gave me a boost and helped me to improve my research. Brainstorming together and critically reviewing my research helped me to get the best out of myself and eventually to the thesis it has become.

Furthermore, I would like to thank Grace, my British friend. Sometimes I was not sure about the interpretation of some English written regulations. Conversations and discussions with her, about the interpretation, improved by understanding of the regulations.

Finally, I would like to thank my dear friends who joined me for many lunches and coffee breaks at the Leeuwenborch. They were always listening if there were struggles. Brainstorming with you helped me to move on and sometimes let go of the concerns which go hand in hand with thesis writing.

## List of abbreviations

CAN	‘Comunidad Andean’ or Andean Community
FAO	Food and Agricultural Organisation
FTA	Free trade agreement
ICA	‘Instituto Colombiano Agropecuario’ or the Colombian Institute of Agriculture
IP	Intellectual Property
IPR	Intellectual property rights
GATT	General Agreement on Tariffs and Trade
IPR	Intellectual property rights
NGO	Non-governmental organisation
TRIPs	Trade-Related Aspects of Intellectual Property Rights
PBR	Plant breeders’ rights
PVP	Plant variety protection
UNDP	United Nations Development Program
UPOV	International Union for the Protection of New Varieties of Plants
US	United States
WTO	World Trade Organisation
WIPO	World Intellectual Property Right Organisation

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## 1. Introduction

*“Developing countries are right to resist restrictive trade agreements”*, is the title of a recently written article on the website on the well-known British newspaper the Guardian (Stiglitz, 2014). It is not the first time free trade agreements (FTAs) are criticized.

Researchers and non-governmental organisations (NGOs) have expressed their concern about these FTAs and the stricter provisions they contain on intellectual property rights (IPR), compared to the Agreement of Trade Related Aspects of Intellectual Property Rights (TRIPs). The TRIPs Agreement requires all countries that are members of the World Trade Organisation (WTO) to provide a minimum level of IPR protection. In the last couple of years developed countries have pursued an increasing number of FTAs with stronger rules for the protection of IPRs than agreed in the TRIPs Agreement, which are called TRIPs-Plus provisions. These trade agreements may regulate pricing, taxing, tariffs, export quotas and methods of production and makes it easier to market domestic products in foreign countries. Despite the short existence of FTAs, researchers are afraid of the impact FTAs and especially TRIPs-Plus provisions, will have on developing countries in many areas such as on food, agriculture, transfer of technology, development, competition law, government procurement and democratic reform (Correa, 2012; Drahos, 2005; El Said, 2005; GRAIN, 2013[1]; Fink and Reichenmiller, 2005; Helfer, 2004[1]; Lindstrom, 2010; Morin, 2009; Sell, 2003).

The TRIPs Agreement has been in force since 1995 and is the most comprehensive multilateral agreement on IPR. TRIPs is an agreement established by the WTO, which is a multinational organisation dealing with the rules of trade between nations. IPRs are the rights given to knowledge, creative ideas or expressions of human mind that have commercial value. They usually give the creator an exclusive right over the use of his/her creation for a certain period of time. Examples of IPRs are trademarks, patents, copyrights, geographical indications and plant breeders' rights. Possibilities of products with IPRs are for example artistic work, literary, musicals and discoveries and inventions, such as plants and plant materials. TRIPs provides a multilateral system to protect these IPRs. While many believed the introduction of minimum standards and greater enforcement for IPRs through TRIPs sufficiently placated the major industrialized nations' demands for strong IPRs, it now appears according to researchers that the TRIPs agreement only served as a base level in the pursuit of stronger IPRs. It is argued that, the United States (US) and other developed nations almost immediately began negotiating an increased number of FTAs which go beyond the agreed levels of the TRIPs Agreement. In this regard, the US is the clear leader in promoting higher standards of IPRs than required in TRIPs (Fink and Reichenmiller, 2005; Lindstrom, 2010).

Most research has been conducted in the entire field of TRIPs-Plus provisions and to a lesser extent specific regarding protection of plants and plant material, despite the amount of researchers and

NGOs who are concerned about the effects of FTAs related to plants and plant material (including seeds) (Sell, 2003; GRAIN, 2013[1]; Narasimhan, 2008; Oxfam International, 2007). Organisations such as the Food and Agricultural Organisation (FAO), Oxfam and United Nations Development Program (UNDP) have written articles on protection of plants and plant material<sup>1</sup>, all of which are mostly descriptive of nature. Oxfam and the UNDP link the options of plants and plant material protection in FTAs with the potential effects it may have on farmers, but a grounded foundation for these conclusion is missing.

An interesting case in which the TRIPs-Plus provisions of a FTA with regard to plants and plant material led to disrepute recently is in the United States-Colombia Trade Promotion Agreement (from now on referred to as the FTA). The developing country Colombia has agreed on the FTA with the US in 2006, which went into force in 2012. The FTA came internationally into disrepute as a result of a documentary on the effects of the FTA on Colombian farmers. The documentary called “Resolution 9.70” created by Solano and Cartolano in 2013<sup>2</sup>, argued that the FTA included TRIPs-Plus provisions on the protection of seeds, which has led to a destruction of farmers produce, high fines and a decrease in income and wealth for a group of Colombian farmers (Solano and Cartolano, 2013). The documentary shows how the harvesting material of Colombian farmers in the area of Campoalegre is destroyed as a result of Resolution 970 which was, according to the producers, required by the FTA. The documentary got a lot of attention after it was selected for the international ‘Good Pitch<sup>2</sup> of Buenos Aires 2013’ price for best documentary around leading social and environmental issues<sup>3</sup>. The documentary led to high resistances of Colombian farmers and NGOs (such as GRAIN) on the FTA and on Resolution 970. As a result of the revolt Resolution 970 is suspended in 2013 for a period of two years (GRAIN, 2013[2]). GRAIN is a small international non-profit farmers’ organisation who spread their concerns about the FTA and the impact of TRIPs-plus provisions on farmers in the article “*Seed laws in Latin America: the offensive continues, so does popular resistance*” of 2013. The concerns the documentary of Solano and Cartolano (A, B, C) and GRAIN (D and E) expressed are the following:

- A) In the FTA the US demands Colombia to create a law that forced Colombian farmers to only plant certified seeds;
- B) As a result of the demands of the US in the FTA the Colombian Institute of Agriculture issued a resolution called 9.70;

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<sup>1</sup> Articles referred to: **Narasimhan, A.M. (2008)**. Towards a balanced ‘sui generis’ plant variety regime: Guidelines to Establish a National PVP Law and an Understanding of TRIPs-Plus Aspects of Plant Rights. Published by: UNDP; **Helfer, L.R. (2004)[2]**. Intellectual property rights in plant varieties. International legal regimes and policy options for national governments. Written for the Development Law service, FAO Legal Office; **Oxfam International (2007)**. Signing Away the Future. How trade and investment agreements between rich and poor countries undermine development. Oxfam Briefing paper.

<sup>2</sup> <https://www.youtube.com/watch?v=TkQ8U2kHAbI>

<sup>3</sup> [https://goodpitch.org/the\\_big\\_idea](https://goodpitch.org/the_big_idea)

C) The 9.70 resolution protects the copyright laws of the companies that produce and therefore considers that farmers reusing seeds are violating the copyright law of the producing company and therefore forcing the farmers to buy seeds every time they plant.

D) Colombia was forced to adopt UPOV 1991 by the US;

E) UPOV 1991 has the – ultimately - purpose to replace indigenous seeds with commercial seeds from foreign companies.

However, research on the impacts of FTAs on plants and plant material protection is scarce and many studies are not scientific. Because the FTAs are a recent development, its impact on farmers is difficult to measure. As a result, Tripp and colleagues (2007) point out that research on the impact has shown mixed results. The results of impact assessments might therefore be unreliable. Therefore other research methods should be examined. To be able to conclude on the impact the United States-Colombia Trade Promotion Agreement causes on Colombian farmers, it is first of all necessary to get a better understanding of the national regulations in place before and after a FTA is signed. These are rarely discussed in this context, let alone critically examined. In short, the documentary and GRAIN might not cover all levels of regulation that affect Colombian farmers. To validate the claims made by Solano and Cartolano, and GRAIN regarding the role of the FTA on Colombian farmers, national regulations need to be considered as well. This research tries to cover this knowledge gap.

## 1.1 Conceptual framework

This research will focus on the FTA between the US and Colombia. This case represents, the US which is seen as the one country with the most and far-reaching TRIPs-Plus provisions (Fink and Reichenmiller, 2005; Lindstrom, 2010). In addition, the US was one of the opponents to discuss IPR protection on a multilateral level within General Agreement on Tariffs and Trade (GATT) which later became the WTO (Sell, 2003). In addition, the documentary “Resolution 9.70” on the FTA with Colombia is an interesting and recent development and an eye-opener for many NGOs and researchers who focus on TRIPs-Plus provisions of FTAs. The documentary dates from October 2013 and has led to an increased amount of opponents of the FTA within the country as well as abroad. The negative claims are made in relation to this FTA, which disavows the US, perhaps in relation to other FTA signed by the US as well.

The research only focuses on the protection of plants and plant material by IPR and related provisions, because this is where the documentary and GRAIN refer to. In this research plants should be understood as all plants of an agricultural nature for the production of a food, because this is the type referred to by the documentary and by GRAIN. In the coming chapters legal texts also refer to plants as harvesting material, which is considered equal. Plant materials include a wide group of plant parts from species. General categories of plant materials include all parts of plants, such as grasses, rushes, woods, stems, roots, leaves and seeds. The legal texts sometimes refer to propagating material,

reproductive material or vegetative material in which I refer to ‘plant material’ and sometimes more specific to only ‘seeds’.

Referring to plant and plant materials means that protection of genetically modified organisms are excluded from this research. Genetically modified plants are interesting but also a whole new area of laws and protection, which is beyond the scope of this research.

The most relevant IPRs to a discussion on plants and plant materials are patents and plant breeders’ rights. A patent is the exclusive right to commercially make, use or sell an invention. Permission from the patent owner is necessary if someone other than the owner wishes to make use of the invention. Compared to other types of IPRs, patents are the strongest form of IPR protection with fewer exemptions in terms of how the protected innovation can be used by people other than the owner (Apte, 2006). Plants and plant material, such as seeds, are not always seen as inventions. Therefore plants and seeds may not be patentable in every legal system.

Plant varieties can be protected by plant breeders’ rights (PBRs), also plant variety rights or plant variety protection (PVP) called. A plant variety is a type or a sub-division of a plant species which can be an agricultural, horticultural or ornamental nature. In this research the focus is on agricultural species, but this does not make a difference for the regulations used because, PBRs are applicable to all plant species aforementioned. If the plant breeders’ right is granted over a variety the owner has the exclusive right to commercially produce and sell a new plant variety. There is not one regulations system covering PBRs, countries can implement a *sui generis* system of PBRs or provide protection of plant varieties as a patent or both (Apte, 2006).

Almost all countries provide a seed certification system, which is used as a quality system for food production and has nothing to do with IPR. However, it does provide seed producers a certificate if nationally established quality requirements are met and in some countries national law provides that only certified seeds may be used for commercialized production. In this manner, the seed certification system does provide some exclusive rights to the owner of the certificate.

## 1.2 Aim and objectives

This research will take a closer look what the provisions of the FTA request and will review the legal system in place for protection of plants and plant material in Colombia before the FTA was implemented. Therefore, this research conducts several legal analyses (see section 1.3) to explore if the aforementioned claims made by Solano, Cartolano and by GRAIN are legally valid.

The aim of this research is to gain more insights in the development of regulations on protection of plants and plant material in place in Colombia which might influence Colombian farmers, in order to create a better understanding whether the concerns raised on the United States-Colombia Trade Promotion Agreement (FTA) in relation to the impact on Colombian farmers are correct. This objective is reached through extensive analyses of the legal regulations on different levels concerning plants and plant material protection.

The main aim is reached through a set of objectives:

- 1) To evaluate whether the United States-Colombia Trade Promotion Agreement contains TRIPs-Plus provisions in relation to plants and plant material protection;
- 2) To gain knowledge regarding plants and plant material protection on the regional and national level;
- 3) To evaluate the provisions of the different levels of regulation;
- 4) To evaluate the claims with the gained knowledge.

The general claim on FTAs and IPR states that the FTAs have a negative effect on farmers, agriculture and food security. The claim is focused on effects of the FTA, which is beyond the scope of this research. However, an indication of its validity might be possible to draw from the perspective of Colombia and the findings on plants and plant material protection of this research. Therefore the conclusion will also touch upon this general claim as well.

### **1.3 Methodology**

The method used for conducting the research is by analysing and comparing the legal text of the TRIPs Agreement, FTA and the regional and national regulations. To evaluate the TRIPs-Plus provisions a comparative legal analysis is conducted between FTA provisions of the 'Intellectual Property' chapter and the related provisions of the TRIPs Agreement. The second analysis demonstrates the findings of the national and regional provisions. Afterwards a comparative analysis is conducted to evaluate the different provisions and finally the findings of the aforementioned analyses are discussed with regard to the claims.

The primary data used in the research are the legal texts of the TRIPs Agreement, the FTA, the UPOV Conventions and the regional and national regulations, which are Laws, Decisions, Decrees and Resolutions. For receiving relevant scientific information, secondary literature was gathered from Google Scholar, HeinOnline and global search from Wageningen University. In addition, blogs and articles of NGOs were consulted. Regarding the latter, information was often not based on scientific research, therefore the reliability of these sources is taken into account.

### **1.4 Structure**

Based on the previous sections the following structure is maintained. Chapter 2 contains the comparative analysis on the TRIPs-Plus provisions with regard to plants and plant material protection. The second analysis is conducted in Chapter 3, which demonstrates both the regional and national regulations related to the protection of plants and plant materials. In the comparative analysis of chapter 4, the different levels of regulation are compared to each other. Afterwards, the discussion takes place in which the legal findings are linked to the claims in Chapter 5. The chapter also demonstrated the possibilities of further research. Finally the concluding remarks are drawn in the conclusion in chapter 6.

## 2. International agreements

The TRIPs Agreement, as introduced in the previous chapter, also contains provisions on the protection on biological resources. Colombia is one of the members of the WTO and therefore tries to implement provisions of the TRIPs Agreement. However, it has been argued by opponents that the US Colombia FTA, signed in 2006, contains stricter provisions (TRIPs-Plus provisions) in relation to the protection of plants and plant material, which might have a negative impact on Colombian farmers, as stated in the claims introduced in the introduction. To see if concerns raised about the FTA could be grounded, it is first of all important to look into the FTA obligations and compare these to the TRIPs provisions. Therefore, in this chapter the provisions of the Intellectual Property chapter of the FTA are compared with the provisions of TRIPs, to examine if the FTA contains TRIPs-Plus provisions. In advance it should be noted that findings on potentially extended provisions are in no way conclusive evidence for the validity of the claims made by opponents of the FTA. The next chapter will go into the regional and national regulations of Colombia, to visualize what provisions are a result of the FTA or are implemented separate from the FTA obligations.

In this chapter all the relevant provisions of the ‘Intellectual Property’ chapter of the FTA related to plants and plant material protection are covered. The chapter is divided in several sub sections, starting with the scope and exception of patent protection and the protection of information of agricultural chemical products (section 2.1 and 2.2). The patent protection is enforced by enforcement provisions discussed in section 2.3. The civil and administrative procedures and remedies as well as criminal procedures and remedies are covered. Afterwards the enforcement regulations of patents and other IPR are discussed, both administrative and criminal procedures. In section 2.4 the already existing agreements agreed upon regarding patents and plants and plant material protection are discussed. The International Union for the Protection of New Varieties of Plants of 1991 (UPOV 1991 Convention) is elaborated on in more detail, because this agreements focus on the protection of plant varieties by plant breeders’ rights (section 2.4.3).

### 2.1 Scope, exception and requirements of patent protection

In Article 16.9 of the FTA the patent provisions are defined. The same as in the TRIPs agreement, paragraph 1 of Article 16.9 of the FTA provides that patents shall be available for any invention, whether a product or process, in all fields of technology, provided that the invention is new, involves an inventive step and is capable of industrial application<sup>4</sup>. In addition, TRIPs provides no uniform standard or definition of what constitutes an ‘invention’, which leads to discussions between members if ‘discoveries’ are ‘inventions’ as well (Repetto and Cavalcanti, 2000). Neither is there a definition of the requirements which have to be met to gain a patent, ‘new’, ‘inventive step’ and ‘capable of

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<sup>4</sup> Article 16.9.1 of the FTA and Article 27.1 of the TRIPs Agreement

industrial application?. Therefore, TRIPs leaves the scope for much variation in the specifics of plants and plant material patenting, which means TRIPs members can decide themselves if and how plants and plant material is implemented in national law (Fowler, 2010). Within the FTA the requirements are better defined, ‘inventive step’ and ‘capable of industrial applications’ are seen synonymous for ‘non-obvious’ and ‘useful’<sup>5</sup>, which set a broad scope for the requirements. If this is broader than TRIPs cannot be argued, because the TRIPs Agreement leaves space for variation.

In addition, Article 16.9.2 of the FTA states that:

*“[...] Nothing in this chapter shall be construed to prevent a Party from excluding inventions from patentability as set out in Articles 27.2 and 27.3 of the TRIPS Agreement. Notwithstanding the foregoing, a Party that does not provide patent protection for plants by the date of entry into force of this Agreement shall undertake all reasonable efforts to make such patent protection available consistent with paragraph 1. Any Party that provides patent protection for plants or animals on or after the date of entry into force of this Agreement shall maintain such protection.”*

The TRIPs articles to which the FTA refers in the first sentence, Article 27.2 and 27.3, provide potential exclusion for patentability. Article 27.2 provides the possible exception of patentability to protect public order and morality. Which means inventions may be excluded from patentability if it interferes with the protection of humans, animals or plant life or health or to avoid serious prejudice to the environment. In addition Article 27.3 states:

*“Members may also exclude from patentability: (a) diagnostic, therapeutic and surgical methods for the treatment of humans or animals;(b) plants and animals other than micro-organisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes. However, Members shall provide for the protection of plant varieties either by patents or by an effective sui generis system or by any combination thereof. The provisions of this subparagraph shall be reviewed four years after the date of entry into force of the WTO Agreement.”*

Article 27.3(b) indicates that plants and animals (other than microorganisms) and essential biological processes for the production of plants or animals may be excluded from patentability. The use of the term ‘plants’ in Article 27.3(b) suggests that the subject matter that may be excluded from patentability has to be understood broadly, including all plant material (tissue, leaves, seeds etc.)

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<sup>5</sup> Article 16.9.1 of the FTA

(Repetto and Cavalcanti, 2000). Therefore Article 16.9.2 of the FTA<sup>6</sup> provides the possibility to exclude inventions as described in TRIPs but, the FTA does not oblige the exclusions.

However, regarding plants and plant material, the second part of Article 16.9.2 of the FTA states that parties should undertake all reasonable efforts to make patents on plants and plant material available. This sentence confirms that plants and plant materials, including all parts of plants and plant related-inventions or discoveries, as well as essentially biological processes might become patentable under the FTA if implemented nationally. The FTA does provide that the invention has to be new, involves an inventive step and is capable of industrial application<sup>7</sup>.

In addition, Article 27.3(b) states that members should provide an effective *sui generis* system, patents or a combination of both for the protection of plant varieties. Organisations such as the FAO and GRAIN argue that the provisions in TRIPs are a spur to plant variety protection (GRAIN, 2013[1]; Helfer, 2004[2]), because all members have to implement a form of protection for plant varieties. The agreement required in the FTA is discussed in more detail section 2.4.3.

Article 16.9.4 of the FTA provides a very narrow justification for revoking or nullifying a patent. As it is stated by the article:

*“[...] Only on grounds that would have justified a refusal to grant the patent according to its laws”. In addition the article states that “[...] A Party may also provide that fraud, misrepresentation, or inequitable conduct may be the basis for revoking, nullifying, or holding a patent unenforceable”.*

Previous provision revoking and nullifying a patent is much stricter than within TRIPs, in which any decision to judicial review to revoke a patent or forfeit a patent should be available<sup>8</sup>. With regard to the duration of protection the FTA does not require anything, which implicated that the duration as provided in TRIPs shall apply.

From this section it can be concluded that the requirements which have to be met to qualify for a patent are not well demarcated in the TRIPs Agreement, which made it possible to set a broad definition in the FTA. The definitions of the requirements set in the FTA, makes more products as well as plants and plant material suitable for patent protection. In addition, plants including all parts of plants are allowed to be patented and parties should take all reasonable efforts to make such patent protection available, but the patentability of plants and plant material is not obliged in the FTA. Furthermore exceptions for patentability and for revoking or nullifying are minimalized and the duration of protection has remained the same.

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<sup>6</sup> The Article 16.9.2 of the FTA refers to the exclusion of patentability mentioned in Article 27.2 and 27.3 of the TRIPs Agreement

<sup>7</sup> Article 16.9.1 of the FTA

<sup>8</sup> Article 32 of the TRIPs Agreement

## 2.2 Information protection of agricultural chemical products

Alongside patents on plants, the FTA also provides protection for plant materials such as agricultural chemical products. These chemicals refer to the broad range of pesticides, including insecticides, herbicides and fungicides used in agriculture, all covered in the scope of section 2.1. Article 16.10.1 of the FTA describes in particular the protection of information for obtaining a patent for an agricultural chemical product. Protection of this information is not new, as it was already protected within TRIPs Article 39.3 as well. The Article explains the protection of information needed to guarantee safety and efficiency of the patent, but the level of protection has increased within the FTA provision. The TRIPs Agreement states:

*“Members, when requiring, as a condition of approving the marketing of pharmaceutical or of agricultural chemical products which utilize new chemical entities, the submission of undisclosed test or other data, the origination of which involves a considerable effort, shall protect such data against unfair commercial use. In addition, Members shall protect such data against disclosure, except where necessary to protect the public, or unless steps are taken to ensure that the data are protected against unfair commercial use.”*

Whilst TRIPs makes an exception for protection if public protection is at stake, the FTA leaves this out and adds that it is not allowed to authorize another to market a same or similar product based on submitted information and evidence of the marketing approval for at least 10 years<sup>9</sup>. Neither is it allowed to use this information, without the consent of the patent owner, to obtain marketing approval in another country<sup>10</sup>. The TRIPs Agreement states that members should protect agricultural chemical data against disclosure except if public protection is at stake<sup>11</sup>.

## 2.3 Enforcement

In general the enforcement provisions look practically similar to the enforcement provisions within the TRIPs Agreement. Nevertheless minor differences can be found, for example in the specificity of the Articles. Some provisions are added or rephrased, which makes the enforcement regulations stricter as enforcement regulation of the TRIPs Agreement. In the following paragraphs the enforcement provisions related to patent protection are described, starting with general obligations, followed by civil and administrative procedures and remedies, as well as provisional measures and finally the criminal procedures and remedies are discussed. It must be borne in mind that patents on plants and plant materials are not obliged within TRIPs and the FTA. Therefore enforcement provisions only apply if plants and plant material are made patentable by national regulation.

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<sup>9</sup> Article 16.10.1(a) of the FTA

<sup>10</sup> Article 16.10.1(b) of the FTA

<sup>11</sup> Article 39.3 of the TRIPs Agreement

### 2.3.1 General obligation

The provision of the FTA on the publicity of the administrative ruling states that all judicial decisions and administrative ruling must be written and shall be made public or otherwise made available for the public<sup>12</sup>. Both parties should provide information on its efforts to provide effective enforcement of intellectual property rights in its civil, administrative and criminal systems<sup>13</sup>. Previously within TRIPS publication of decision and ruling was preferable but not obligatory. Within TRIPS there was no provision on publication of efforts of providing effective enforcement of IPR by the party, which means the provision is stricter than what is agreed upon in the TRIPS Agreement.

### 2.3.2. Civil and administrative procedures and remedies

A civil remedy refers to the remedy that a Party has to pay to the victim if he or she infringes the law and thereby creates a loss for the victim. The civil remedies of the FTA related to IPR in general do not differ from TRIPS. In both the FTA<sup>14</sup> and in the TRIPS Agreement<sup>15</sup> infringers have to pay damages to the right holder for the injury he suffered as a result of the infringement. There are some provisions added on copyright infringement and trademark counterfeiting. These are more detailed and stricter as in TRIPS, but not relevant for this research. The ones which may relate to infringement of plants and plant material protection are discussed below.

Provisions on the right of information are made more specific and detailed within the FTA compared to TRIPS. Article 47 of the TRIPS Agreement states that the infringer shall inform the right holder of the identity of third persons involved in the process of the infringed goods, unless this would be out of proportion to the seriousness of the infringement. In the FTA much more text is given to this element:

*“[...] any information that the infringer possesses regarding any person or persons involved in any aspect of the infringement and regarding the means of production or distribution channel of such goods or services, including the identification of third persons involved in the production and distribution of the infringing goods or services or in their channels of distribution, and to provide this information to the right holder”<sup>16</sup>.*

In addition, judicial authorities are allowed to impose sanctions if a party fails to abide<sup>17</sup>. Regarding farmers this could mean that when farmers are making use of protected plants or plant material without authorization of the right holder, the right holder has the right on all relevant information

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<sup>12</sup> Article 16.11.2 of the FTA

<sup>13</sup> Article 16.11.3 of the FTA

<sup>14</sup> Article 16.11(a)(i) of the FTA

<sup>15</sup> Article 45 of the TRIPS Agreement

<sup>16</sup> Article 16.11.12 of the FTA

<sup>17</sup> Article 16.11.13 of the FTA

related to the infringement. In other words, more rights are granted to the right holder in relation to the right of information compared to TRIPs.

Moving on, the FTA includes provisional measures (or ‘interim measures’), including seizure of devices and products suspected of being involved in the prohibited activity<sup>18</sup>. Within TRIPs it is allowed to dispose of materials and implements involved in the prohibited activity or place these materials outside the channels of commerce but, in consideration of such a request, the seriousness of infringement is taken into account compared to the remedies ordered and the interest of third parties have to be taken into account as well<sup>19</sup>. In addition, TRIPs does not allow disposal of materials as a provisional measure. Within both TRIPs and the FTA damages are included to compensate for the injury of the right holder, as mentioned before, but in addition, within the FTA it is possible for the right holder to claim pre-established damages, which shall be available on the election of the right holder as an alternative to actual damages<sup>20</sup>. Civil remedy mentioned under Article 16.11.15(c) on the payment to the prevailing right holder is no different than agreed upon in the TRIPs Agreement<sup>21</sup>. With regard to §15(d), it states that devices found to be involved in the prohibited activity shall be destroyed. Within TRIPs, like argued before, it is only allowed to dispose of materials involved in the prohibited activity or place these materials outside the channels of commerce. Furthermore, TRIPs makes some considerations, such as the exception for the right holder’s right to information if the seriousness of the infringement is out of proportion, which is left out in the FTA.

### 2.3.3 Criminal procedures and remedies

Within the TRIPs Agreement only one Article is used to describe the criminal procedures applicable<sup>22</sup>. It states:

*“Members shall provide for criminal procedures and penalties to be applied at least in cases of willful trademark counterfeiting or copyright piracy on a commercial scale. Remedies available shall include imprisonment and/or monetary fines sufficient to provide a deterrent, consistently with the level of penalties applied for crimes of a corresponding gravity. In appropriate cases, remedies available shall also include the seizure, forfeiture and destruction of the infringing goods and of any materials and implements the predominant use of which has been in the commission of the offence. Members may provide for criminal procedures and penalties to be applied in other cases of infringement of intellectual property rights, in particular where they are committed willfully and on a commercial scale”.*

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<sup>18</sup> Article 16.11.15(a) of the FTA

<sup>19</sup> Article 46 of the TRIPs Agreement

<sup>20</sup> Article 16.11.15(b) of the FTA

<sup>21</sup> Article 45.2 of the TRIPs Agreement

<sup>22</sup> Article 61 of the TRIPs Agreement

The Article is at least applicable for willful trademark counterfeiting or copyright piracy, which means it could be applicable to other forms of willful counterfeiting of other IPRs, like patents for example, but TRIPs is unclear if sanctions apply to patent and plant breeders' right infringement. Members may provide criminal procedures and penalties to other cases of IPR, but are not obliged as for trademark and copyright infringement. Furthermore, it is optional within TRIPs to provide patents on plants and plant materials, as discussed in section 2.1. The FTA, on the other hand, is very clear in its remedies in relation to all kind of IPRs and obliges seizure and destruction of counterfeit goods and related material<sup>23</sup>. Because the FTA encourage the establishment of patent protection on plants and plant material, the criminal procedures and remedies might apply to patents and plant breeders' rights as well. Remedies included in this article corresponding to the FTA include imprisonment, monetary fines<sup>24</sup> and seizure and destruction of counterfeit goods and related material<sup>25</sup>. The FTA has split up the remedies in a, b, c and d<sup>26</sup>, but looking into them shows no differences with TRIPs remedies.

Briefly, the criminal procedures and remedies are only differently formulated but are technically the same. However, the FTA refers to IPR to all kinds of IPRs, whereas the TRIPs Agreement refers to willful trademark counterfeiting or copyright piracy on a commercial scale and not directly to other forms of IPR.

## 2.4 Other agreements

In the first Article of the 'Intellectual Property' chapter the general provisions on IPR are covered. It states which international agreements have to be implemented. A few international agreements are relevant for plant and plant material protection. In the FTA it is agreed that both parties have to ratify or accede to the Budapest Treaty on the International Recognition of the Deposit of Microorganisms for the Purposes of Patent Procedure of 1977. In addition, it is stated that parties shall make all reasonable efforts to ratify or accede the Patent Cooperation Treaty and the Patent Law Treaty of 2000. At last, both parties agreed to ratify or accede to the UPOV Convention 1991 by January 1, 2008<sup>27</sup>. The aforementioned agreements are elaborated on below, of which the UPOV 1991 Convention in very much detail because of it is highly relevant for the research.

### 2.4.1 Budapest Treaty

One of the provisions is the accession to the Budapest Treaty. WIPO provides that the main feature of the treaty is that a contracting state which allows or requires the deposit of microorganisms for the purposes of patent procedure must recognize, for such purposes, the deposit of a microorganism with any "international depositary authority", irrespective of whether such authority is on or outside the territory of the said State. In practice, the term "microorganism" is interpreted in a broad sense,

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<sup>23</sup> Article 16.11.27 of the FTA

<sup>24</sup> Article 16.11.27(a) of the FTA

<sup>25</sup> Article 16.11.27(b) of the FTA

<sup>26</sup> Article 16.11.27 of the FTA

<sup>27</sup> Article 16.1 of the FTA

covering biological material, the deposit of which is necessary for the purposes of disclosure, in particular regarding inventions relating to the food and pharmaceutical fields.

#### **2.4.2 The Patent Cooperation Treaty and the Patent Law Treaty**

The Patent Cooperation Treaty makes it possible to seek patent protection for an invention simultaneously in each of a large number of countries by filing an international patent application. The treaty had to be ratified or acceded according the FTA, but WIPO provides that the treaty was already in place in Colombia since 2001<sup>28</sup>. The Patent Law Treaty of 2000, which Colombia and the US should make all reasonable efforts to ratify or accede is not into force in Colombia. This treaty's main feature is to harmonize and streamline formal procedures in respect of national and regional patent applications and patents and, thus, to make such procedures more user friendly (WIPO, n.d), but this is not in force in Colombia today.

#### **2.4.3 UPOV 1991 Convention**

According to provisions in the FTA Colombia has to accede to the 1991 Convention of UPOV, which stands for the International Union for the Protection of New Varieties of Plants. UPOV protects the rights of plant breeders who create new varieties, mainly via a form of IPR called plant breeder's rights (Apte, 2006). The first UPOV system came into being with the adoption of the International Convention for the Protection of New Varieties of Plants by a Diplomatic Conference in Paris on December 2, 1961. This was the point at which there was recognition of plant breeders rights on an international level (UPOV, 2011). The Agreement has been revised several times, the ones still in place are the UPOV Convention of 1978 and 1991. In this section the provisions of UPOV 1991 Convention, as obliged in the FTA, are discussed.

##### **2.4.3.1 Scope, requirements and duration of protection**

The amount of genera and species protected under UPOV 1991 Convention is provided in Article 3 of the Agreement. It is stated that at the date on which the UPOV Convention becomes bound at least 15 plant genera or species should be protected and at the latest 10 years from the acceding to the Convention all plant genera and species shall be protected under the plant variety protection system<sup>29</sup>. In order to be granted a plant breeder's right, varieties need to fulfil the requirements of novelty, distinctness, uniformity and stability<sup>30</sup>. The concepts are explained as follows<sup>31</sup>; 'Novel' means that the harvesting material (the variety) and the propagating material (seeds and other plant material) must not have been sold or disposed to others for more than one year prior to the application for a breeder's right; 'distinct' means that it is clearly distinguishable from any other variety whose

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<sup>28</sup> Contracting parties of the Patent Cooperation Treaty  
[http://www.wipo.int/treaties/en/ShowResults.jsp?lang=en&treaty\\_id=6](http://www.wipo.int/treaties/en/ShowResults.jsp?lang=en&treaty_id=6)

<sup>29</sup> Article 3(2)(i) and (ii) of the UPOV 1991 Act

<sup>30</sup> Article 5(1) of the UPOV 1991 Act

<sup>31</sup> Definitions of the requirements according the UPOV 1991 Convention, Article 6, 7, 8 and 9

existence is a matter of common knowledge; ‘uniformity’ means the particular features of the variety’s propagation has to be sufficiently uniform in its relevant characteristics as the variety itself; At last, ‘stability’ refers to the relevant characteristics which have to remain unchanged after repeated propagation. If requirements are met the breeder’s right is granted a protection of no shorter than 20 years from the date of the grant of the breeder’s right. For trees and vines, the said period shall not be shorter than 25 years from the said date<sup>32</sup>.

#### *2.4.3.2 Exclusive rights in propagating and harvesting material*

If plant breeder’s rights are granted for a variety, the breeder has the authorization in respect to seeds and other propagating material of the protected variety to require authorization for production and reproduction, conditioning for the purpose of propagation, offering for sale, selling or marketing, exporting, importing and stocking for any of the purposes mentioned before<sup>33</sup>.

Breeders also receive exclusive rights in relation to harvesting material, the variety itself. The related article provides the same protection as granted for propagating material, in respect to harvested material, including entire plants and parts of plants if protected material is obtained without consent of the breeder<sup>34</sup>. The same protection is applied for essentially derived varieties; these varieties share all the essential characteristics of a registered plant variety but are nevertheless clearly distinguishable from the protected variety<sup>35</sup>.

#### *2.4.3.3 Breeders’ exemption and farmers’ privilege*

Next to the aforementioned rights, the UPOV 1991 Convention also provides the breeders’ exemption and the farmers’ privilege. The breeders’ exemption is a compulsory restriction of Article 15(1) and provides that breeders’ rights shall not extend to acts done privately and non-commercially purposes and acts done for experimental purposes. Furthermore breeders’ rights shall not extend to the purpose of breeding other varieties, except where this variety is an essentially derived variety<sup>36</sup>, which means protected varieties are allowed to be used by breeders for the purpose of creating new varieties except for essentially derived varieties. UPOV 1991 recognizes that real progress in breeding -which, for the benefit of society, must be the goal of IPR in this field-relies on access to the latest improvements and new variation (UPOV, 2011). This is also called the ‘breeder’s exemption’.

The exception provided in UPOV 1991 is optional and is better known as the ‘farmers’ privilege’. It restricts within reasonable limits the breeder’s right in relation to the protected variety, in order to permit farmers to use the protected variety for harvesting and reproduction, on their own holdings<sup>37</sup>. This means plants and seeds of certain varieties might be used and saved by farmers for

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<sup>32</sup> Article 19 of the UPOV 1991 Act

<sup>33</sup> Article 14(1) of the UPOV 1991 Act

<sup>34</sup> Article 14(2) of the UPOV 1991 Act

<sup>35</sup> Article 14(5)(c) of the UPOV 1991 Act

<sup>36</sup> Article 15(1)(iii) of the UPOV 1991 Act

<sup>37</sup> Article 15(2) of the UPOV 1991 Act

their own use, but it is prohibited to place the products on the market or exchange the seeds (UPOV, 2011).

## 2.5 Interim conclusion

In this chapter the regulations related to protection of plants and plant material of the FTA are compared to the regulations of the related TRIPs Agreement provisions. The chapter discussed the two ways plants and plant material can be protected, patents and plant breeders' rights. Next to these two main IPRs the enforcement regulations are discussed as well as some other provisions, such as protection of information of agricultural chemical products, as well as some agreements which might relate to the protection of plants and plant material.

This chapter demonstrates that the provisions of the FTA are on many levels stricter than in the TRIPs Agreement. Therefore the FTA contains TRIPs-Plus provisions. In the FTA parties agreed to undertake all reasonable efforts to make plants and plant material patentable, although it is not obliged, which means that the enforcement regulations of the FTA, apply to patents on plants and plant material if plants and plant materials are made patentable nationally. The concerns raised by the documentary and by GRAIN are very likely not caused by the findings on the accession to the Patent Cooperation Treaty, the Patent Law Treaty and the Budapest Treaty. Because the Patent Cooperation Treaty was already in place in Colombia before the FTA was signed. In addition, the Patent Law Treaty is still not implemented and the Budapest Treaty, on deposit of microorganisms for the purposes of patent procedure, is not linked to the concerns raised. The one exception is the UPOV 1991 Convention, which is highly interesting and very much related to the concerns raised. The UPOV 1991 Convention provides rights for breeders' for plant varieties. TRIPs only stated that a system for the protection of plant varieties should be in place, but does not decide which one.

To get a clear overview of these TRIPs-Plus provisions which could be the result of the claims made by the documentary and by GRAIN, the regional and national regulation need to be examined, which is done in the next chapter.

### **3. Regional and national regulations**

The national regulations on IPRs in Colombia are based on a general system, created by the Andean Community, and a more specific national regulation. The Andean Community (CAN) is a regional intergovernmental organisation, a trade-bloc, where regional barriers to trade are reduced or eliminated among the South American countries of Bolivia, Colombia, Ecuador and Peru. The countries signed the Cartagena Agreement in 1969 which was the establishment of the Andean Community.

In this chapter references are made to Decisions, Laws, Decrees and Resolutions of both the Andean Community as well as of national regulations. Referring to ‘Decisions’ of the Andean Community, it should be noted that in this chapter ‘Decisions’ refer to laws whose legal value is that of compulsory compliance and direct application in Colombia, these being principles through which the Decisions prevail over the domestic law of each of the countries dealing with the subjects which they regulate. Secondly, the subjects which are not regulated by the Andean Community are governed by the legal rules established by Colombian domestic law (Mantilla, 2007). Within referring to ‘Law’ the national law of Colombia is meant, mostly for adhering to the Decisions of the Andean Community. ‘Resolutions’ are enforcement measures to comply with national laws and are created by the competent national authority. Finally, the chapter also refers to ‘Decrees’, laws which are established by one single person or group, without approval by a legislative assembly.

In summary, the Colombian legal system is complex, taking into account the regional regulations of the Andean Community and national regulations. In this chapter the different regulations in relation to the protection of plant and plant material are covered. Starting with the regional regulations of the Andean Community regarding patent protection and protection of plant varieties (section 3.1). Afterwards the national regulations are examined, which includes the regulations on patent protection and plant breeders’ rights (section 3.2). Within this section attention is also given to enforcement regulations and to regulations on the seed certification system. Finally, the section discusses two interesting Colombian Court cases related to plant breeders’ rights.

#### **3.1 Regional regulations**

In this part the protection provided by the Andean Community on plants and plant material is discussed. Starting with the provisions on the possibility of patent protection (section 3.1.1). Afterwards the decisions of the Andean Community in relation to plant breeders’ rights are discussed (section 3.1.2).

##### **3.1.1 Patent protection on the regional level**

In 1993 the Andean Community introduced Decision 344 on Common Provisions on Industrial Property to comply with the standards of TRIPs. The Decision does not provide an exclusion from

patentability for plants and plant material, which means that plants and plant material were allowed to be patented in this period. However, the decision was replaced by Decision 486<sup>38</sup> in 2001. Decision 486 is also meant to bring the IPR systems of the CAN member countries in line with the TRIPs Agreement with more detailed procedures and enforcement mechanisms (Helfer, Alter and Guerzovinch, 2009). Changes have been made regarding trademarks, industrial designs and patenting of generic drugs. However, regarding plants and plant material Article 20 of Decision 486 states that plants, animals and essentially biological processes for the production of plants or animals other than non-biological or microbiological processes shall not be patentable. The transitional provisions of the decision incorporate the patentability of microorganisms until such a time different measures are adopted as a result of the review provided for in Article 27.3(b) of the TRIPs Agreement. This is in contrast with the previous decision where plants and plant material were not explicitly excluded from patentability. Even though the plants and plant material patents were not explicitly excluded in the previous regulations does not mean that patents on plants and plant material were made available, the latter regulation is however clear in its exclusion.

Since 2008, CAN member countries may exercise the option to adopt their own national IP standards, to encourage the member countries to develop and deepen certain IPRs through national legislation. Decision 689 allows amending certain provisions of Decision 486 by granting rights to each country member to develop and strengthen protection of IPR through national regulation. Decision 689 provides flexibility to member countries to be able to complement the protection of IPR according to the demands and multilateral standards (Economist Intelligence Unit, 2010), which means the decision makes it possible for Colombia to implement patent protection on plants and plant material nationally. Helfer and Alter (2013) explain that decisions of the Andean Community on IP have direct effect and serve as the national IP law in each of the member states. Colombia and Peru lobbied for the decision to enable them to comply with their respective bilateral treaties with the United States (Barreda, 2008; Kelechava, 2008).

### **3.1.2 Plant breeders' rights on regional level**

Next to the previous discussed decision on 'Common Provisions on Industrial Property' Colombia is bound to Decision 345 of the Andean Community of 1993<sup>39</sup>. The decision recognizes and ensures the protection of the rights of breeders of new plant varieties by the grant of breeders' certificates. The decision is applicable to all botanical genera and species, the same as provided in the UPOV 1991 Convention. With regard to the conditions required for breeders' rights, the Decision states:

*“The Member Countries shall grant breeders' certificates to persons who have created plant varieties, insofar as the varieties are new, uniform, distinct and stable, and if they have been*

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<sup>38</sup> Decision 486 - Establishing the Common Industrial Property Regime (2000)

<sup>39</sup> CAN Decision 345 - Common Provisions on the Protection of the Rights of Breeders of New Plant Varieties (1993)

*given a denomination that constitutes their generic designation. For the purposes of this Decision, “created” shall be understood to denote the production of a new variety by the application of scientific skills to the genetic improvement.”*<sup>40</sup>

The requirements are similar to the requirements of the breeders’ rights agreed in UPOV 1991, discussed in section 2.4.3.1. Article 24 prohibits third parties from engaging without consent of the breeder in the following acts in respect to seeds and other propagating material of the protected variety:

*“(a) production, reproduction, multiplication or propagation; (b) preparation for the purposes of reproduction, multiplication or propagation; (c) offering for sale; (d) sale or any other act that entails placing reproductive, propagating or multiplication material on the market for commercial purposes; (e) exportation; (f) importation; (g) possession for any of the purposes mentioned in the foregoing subparagraphs”.*

The protection granted in Article 24 of Decision 345 is the same as the protection granted in UPOV 1991, with relation to the areas of protection as well as the prohibition of the possession and use of plants and plant material. Article 24 also provides the same protection for harvesting material<sup>41</sup>, including entire plants and parts of plants. Article 25 provides an exception of the plant breeders’ rights for the breeding and exploitation of a new variety, the breeders’ exemption. The decision also provides the farmers’ privilege, which states that farmers are allowed to use farm-saved seeds for their own use, but the commercial use of multiplication, reproductive or propagating material, including whole plants and parts of plants of fruit, ornamental and forest species is prohibited<sup>42</sup>.

The exclusive rights for plant breeders of new varieties, as well as the breeders’ exemption and the farmers’ privilege extend to the same areas as the rights provided in UPOV 1991. The duration of protection provided by Decision 345 is almost in line with UPOV 1991 as well. Decision 345 provides 20 to 25 years in the case of vines, forest trees and fruit trees, including their rootstocks, and from 15 to 20 years for other species and UPOV 1991 provides at least 25 years for vines, forest trees and fruit trees, including their rootstocks and at least 20 years for other varieties.

Article 3 of Decision 345 states that each member country shall appoint a competent national authority, establish function and establish a national procedure for the implementation of Decision 345. In Colombia the appointed competent authority is the ‘Instituto Colombiano Agropecuario’ (ICA). The ICA was established in 1962 with a mission to coordinate and intensify agricultural sciences research. In 1967 the Institute was requested by the Ministry of Agriculture to establish the

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<sup>40</sup> Article 4 of Decision 345 of 1993

<sup>41</sup> Article 24(i) of Decision 345

<sup>42</sup> the Article 26 of Decision 345

seed certification system (ICA, n.d.). The ICA and the procedures provided by ICA, inter alia to comply with Decision 345, are elaborated on in the national section of this chapter in section 3.2.2.

In the sub-sections of 3.2 the regulations regarding plants and plant material protection implemented on national level are demonstrated. It will be clear to what extent decisions of the Andean Community are implemented and which regulations are implemented independently of the Andean Community.

## **3.2 National regulations**

National regulations were in place since before the decisions of the Andean Community in Colombia. Some of these laws have been maintained in force with amendments in place in relation to sanctions against the infringement of IPR and some have been established as a result of CAN decisions (Mantilla, 2007). The Codes discussed in section 3.2.5.1 and 3.2.5.2 are sets of rules pertaining to specific subject matters and have their roots in Roman Law and is heavily influenced by the French (Napoleonic Code) system and the Italian and Spanish legal traditions. Only the relevant articles of the Commercial Code and the Penal Code are discussed. The first Commercial Code was established in 1887 and the Penal Code in 1873 (Ramirez, 2007). First the regulations on patents (section 3.2.1) and the regulations on plant breeders' rights (section 3.2.2) are demonstrated. Then the national regulation on agricultural chemical products is demonstrated briefly (section 3.2.3) followed by the seed certification system (section 3.2.4). The enforcement regulations related to patents and plant breeders' rights are subsequently discussed (section 3.2.5). Afterwards the acceding of Colombia to the UPOV 1978 Convention is discussed in detail (section 3.2.6). Finally, two interesting Colombian Court cases related to plant breeders' rights are discussed (section 3.2.7).

### **3.2.1 National regulations on protection of patents**

Colombia implemented Decision 344 of the Andean Community of 1993, which did not explicitly exclude plants and plant material from patentability. However, as is discussed in section 4.1.1. the decision was replaced by Decision 486 of 2001, which rules that plants, animals and essentially biological processes for the production of plants or animals that are not non-biological or microbiological processes shall not be patentable.

One of the barriers to the FTA with the US was that the US insisted on the right to patent plants. Colombia pledged to take all reasonable steps to provide patent protection to new plants (ITAC-15, 2006). Colombia still did not implement a law to provide patents on plants and plant material.

Despite the requirements of the FTA, Colombia still does not legally provide patents for plants and plant materials. Therefore the enforcement regulations discussed in section 3.2.5 will not apply for plants and plant material. Nevertheless the enforcement regulations are still elaborated on briefly because, they might apply to plants and plant materials when they become patentable. Despite, the

prohibition of plants and plant material patents, the Colombian government did make plant breeders' rights available under Decision 345 (section 3.2.2).

### **3.2.2 National regulations on protection of plant varieties**

As stated in section 3.1.2 Decision 345 of the Andean Community of 1993 required a national competent authority held responsible for acceding to the Decision on the protection of plant breeders' right. The plant breeders' right of Decision 345<sup>43</sup> was implemented nationally in Colombia in March a year later by Decree 533 (excluding the duration, which was respectively 15 and 20 years). The 'Instituto Colombiano Agropecuario' (ICA) has been assigned to be the national authority responsible for the management of genetic resources from plants and the plant variety protection in 1994<sup>44</sup> (Harders, n.d.). Decision 345 is, as shown in section 3.1.2, in line with UPOV 1991 Convention. In other words, by implementing the decision in national law, Colombia provided plant breeders' rights which are similar to the breeders' protection provided by the UPOV 1991 Convention.

It is remarkable that another national law<sup>45</sup> was implemented a year later, in 1995, to accede to the UPOV 1978 Convention, which provided rights less strict compared to the provisions in place<sup>46</sup>, while breeders' rights of Decision 345 were already in place, which were in line with the UPOV 1991 provisions. The plant breeders' right of UPOV 1978, of which Colombia is a member, is elaborated in detail in section 3.2.6.

In addition to the rights for breeders, the duration of protection for new plant varieties has been increased in national law in 2002 as well. Article 7 of Colombia's plant breeders' rights protection was revised with regard to the duration of protection. The amendment indicates that the duration is 25 years for trees and grapevines and 20 years for the other plants<sup>47</sup> (Clarke, Modet and Co, 2012). Furthermore, in April 2012 the Colombian government approved Law 1518 which integrates the UPOV 1991 Convention into national legislation, which led to a Constitutional Court case, discussed in section 3.2.7.

### **3.2.3 National regulation related to chemical agricultural products**

ICA implemented Decree 502 of 2001 on chemical agricultural products, to comply to the Decision 436 of the Andean Community on this topic<sup>48</sup>. By doing so, data protection for agrochemicals is granted and 10 years of exclusivity for safety and efficacy data is indicated. In 2012 however, Article 5 of the Decree was amended because of FTA with the US making it necessary to establish common

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<sup>43</sup> CAN Decision 345 on as plant breeders' right as discussed in Section 5.1.2

<sup>44</sup> Article 2 of Decree 533 (1994)

<sup>45</sup> The national law referred to is Law 243 - Approving the International Convention for the Protection of New Varieties of Plants (UPOV Convention) of 2 December 1961 as revised in Geneva on 10 November 1972 and 23 October 1978 (1995)

<sup>46</sup> An extensive elaboration of UPOV 1978 in Section 5.2.4 and a clear overview of the differences in Section 6.1.11

<sup>47</sup> Decree 533 was revised by Decree 2687

<sup>48</sup> CAN Decision 436 - on chemical agricultural products (1998)

provisions on the protection of undisclosed information submitted for obtaining registration of new chemical agricultural products, which is indeed provided by the FTA<sup>49</sup>.

### 3.2.4 Seed certification

ICA established Resolution 2046 in 2003. Resolution 2046 regulates and controls the production, multiplication, import, export, distribution and marketing of seeds and harvesting material in the country, preserving the quality of seeds for sowing, in order to ensure the quality of the material produced and marketed. Breeders' rights are not incorporated in the resolution, but it does say something about seed savings. According to Article 21 of the resolution, it is permitted only for farmers with a farm less or equal than five hectares to use farm-saved seeds of a protected variety (meaning: inter alia certified and registered seeds and PBR protected varieties) and it is in no case possible to sell to third parties. Resolution 2046 refers to plant breeders' rights in Article 19, stating that the current regulation applies.

*“ARTÍCULO 19o. Todo cultivar bajo el régimen de protección a los derechos de los obtentores de variedades vegetales que se vaya a utilizar en la multiplicación de semillas en el país, deberá someterse a la reglamentación vigente sobre producción de semillas.*

*ARTÍCULO 21o. Cuando un agricultor quiera reservar semilla de una variedad protegida producto de su propia explotación para sembrarla para su propio uso, deberá comunicar al ICA esta situación indicando dónde realizará el acondicionamiento de la respectiva semilla. Esta excepción es únicamente para los agricultores con una explotación agrícola igual o menor de cinco hectáreas cultivables y cuando el derecho del obtentor haya sido ejercido razonablemente con respecto a la primera siembra. Por ningún motivo esta semilla podrá ser vendida a terceros. Dentro de esta excepción, por razones de bioseguridad, no se incluyen variedades obtenidas por métodos de ingeniería genética.”*

In addition, small farmers who may use farm-saved seeds are required to report to a local ICA office and give details of how these seeds will be processed and used (Worldbank, 2006). Resolution 2046 has been revised a few times; the latest version is Resolution 970 of 2010. The latest resolution regulates and controls the production, packaging, import, export, storage, sale, transfer or use of seeds and other propagating material of all botanical genera and species for planting cultivars obtained through techniques and conventional breeding methods, as provided in Article 1.

*“Artículo 1º. Objeto. Reglamentar y controlar la producción, acondicionamiento, importación, exportación, almacenamiento, comercialización, transferencia a título gratuito*

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<sup>49</sup> Refers back to Section 4.2 on Agricultural chemical product protection in the FTA

*y/o uso de la semilla sexual, asexual, plántulas o material micropropagado de todos los géneros y especies botánicos para siembras de cultivares obtenidos por medio de técnicas y métodos de mejoramiento convencional, incluyendo dentro de estos, la selección de mutaciones espontáneas o inducidas artificialmente y por métodos no convencionales como los organismos modificados genéticamente a través de ingeniería genética, con el fin de velar por la calidad de las semillas y la sanidad de las cosechas.”*

Article 2 of the Resolution, as mentioned below, states that the Resolution applies to all persons involved in breeding and producing, importing or persons who use seeds or other propagating material of all types of botanical genera and species for planting, as well as those in possession of plant material<sup>50</sup>.

*“Artículo 2°. Campo de aplicación. La presente resolución se aplica a todas las personas naturales o jurídicas que investiguen en mejoramiento genético, evalúen cultivares, produzcan, acondicionen, importen, exporten, almacenen, comercialicen, transfieran a título gratuito y/o usen semillas, plántulas o material micropropagado de todos los géneros y especies botánicos para siembra, así como aquellas que en tenencia de material vegetal puedan poner en riesgo el estatus sanitario y/o fitosanitario en el país.”*

In addition, Article 15 of Resolution 970 provides more restrictions on the use of farm-saved seeds next to only allowance on a single farm equal or less than 5 hectares and only for own use, the provisions states authorization of ICA is required and the amount of produce may not exceed the density as is provided by ICA. The implementation of Resolution 970 has led to a revolt, which resulted in a suspended of the resolution in 2013 for a period of two years (GRAIN, 2013[2]).

Resolution 2046 looks similar to Resolution 970, but there are few essential differences. Resolution 2046 provides protection for registered, certified seeds, but does not oblige for certification for seeds produced to sell or market. In Resolution 970 all seeds need to be certified by ICA before marketing is allowed. Furthermore, they both limit the use of farm-saved seeds of certified, registered and seeds of protected varieties under plant breeders' rights (Tripp, Louwaars, Eaton, 2007; Worldbank, 2006)

### **3.2.5 Enforcement of patents and plant breeders' rights**

The enforcement regulations on patents have been in Colombia for many years, sometimes amendments were made. However, the patent enforcement regulations do not relate to plants and plant material, because they are not made patentable by the national law, it is still interesting to have a look at what provisions are there and how they might change as a result of the FTA. Tripp and colleagues

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<sup>50</sup> Article 2 of Resolution 970

(2007) state, that enforcement is a particularly important challenge for plant breeders' rights. Because plant breeders' rights are private rights, breeders are responsible for detecting violations of their rights. Therefore, the UPOV website states that the Conventions require members to provide appropriate legal remedies on a national level for the effective enforcement; however it is a matter for breeders to enforce their rights (UPOV, n.d.).

### **3.2.5.1 Commercial Code**

Article 568 of the Commercial Code of 1972 provides penalties for patent infringements:

*“568. — Any patentee or licensee may apply to the courts to order preventive measures necessary to avoid the infringement of the rights guaranteed to the patentee. The plaintiff shall append to his application such elements as may summarily prove the existence of the infringement; he shall indicate in his petition how in his opinion such infringement should be prevented, and he shall deposit the security ordered to guarantee the compensation of any damage to the alleged infringer or third parties. The preventive measures may consist in ordering the infringer to deposit security as guarantee that he will refrain from committing the act for which he was denounced; in confiscating the articles manufactured in infringement of the patent and in issuing an injunction forbidding the advertising thereof; in the seizure of the machinery or equipment used for manufacturing the articles infringing the patent, or in any other similar measure. The police shall assist in the enforcement of the measures ordered.”*

The Commercial Code established in 1972 already provided penalties and preventive measures for patent infringement, which include compensation of damages and the seizure of machinery or equipment used for the production of the infringed product. The Commercial Code provides seizure of machinery and equipment as a preventive measure, as well as the FTA does many years later.

### **3.2.5.2 Penal Code**

Colombia has its own Penal Code, also called the Criminal Code, which added inter alia penalties against the infringement of IP in 2000 in Law 599. Starting with, Article 306 which states everyone who fraudulently uses a patent will be liable to imprisonment of 2 to 4 years and a fine of 20 to 2,000 the legal minimum monthly wages, which is 616,000 Colombian pesos per month (approximately a minimum monthly wages of 258 US dollars per month). The same penalties counts for all persons involved in the process (finance, supply, distribute, put up for sale, market, transport or acquire commercial or trading purposes, production of goods or distribution).

*“Artículo 306. Usurpación de marcas y patentes. El que utilice fraudulentamente nombre comercial, enseña, marca, patente de invención, modelo de utilidad o diseño industrial protegido legalmente o similarmente confundible con uno protegido legalmente, incurrirá en*

*prisión de dos (2) a cuatro años y multa de veinte (20) a dos mil (2.000) salarios mínimos legales mensuales vigentes. En la misma pena incurrirá quien financie, suministre, distribuya, ponga en venta, comercialice, transporte o adquiera con fines comerciales o de intermediación, bienes producidos o distribuidos en las circunstancias previstas en el inciso anterior.”*

Article 307 is on unlawful use of patents without authorization of the patent owner. Penalties for unlawful use are imprisonment for 1 to 4 years and a fine of 20 to 1,000 minimum monthly wages. As well as for unauthorized use or possession of the patent, the same penalties are held for people involved in the process.

*“Artículo 307. Uso ilegítimo de patentes. El que fabrique producto sin autorización de quien tiene el derecho protegido legalmente, o use sin la debida autorización medio o proceso patentado, incurrirá en prisión de uno (1) a cuatro (4) años y multa de veinte (20) a mil (1.000) salarios mínimos legales mensuales vigentes. En la misma pena incurrirá el que introduzca al país o saque de él, exponga, ofrezca en venta, enajene, financie, distribuya, suministre, almacene, transporte o adquiera con fines comerciales o de intermediación producto fabricado con violación de patente”*

The article was amended in 2006 and the penalties were increased to 4 to 8 years in prison and a fine of 26.66 to 1,500 minimum monthly wages. In addition, the article will also apply for plant breeders' rights<sup>51</sup> (Mantilla, 2007). The article is provided in English on the website of UPOV.

*“Article 306 of the Criminal Code shall be worded as follows:*

*Usurpation of Industrial Property Rights and Plant Breeders' Rights: Any person who fraudulently uses a trade name, a trademark, patent, utility model, industrial design, or infringes Plants Breeders' Rights, which are legally protected or similar to the point of confusion to a right legally protected, shall receive the penalty of prison sentence of four (4) to eight (8) years, and a fine of twenty six point sixty six (26.66) to one thousand five hundred (1,500) minimum monthly legal salaries in force. The same punishments shall be imposed on any person who finances, supplies, distributes, offers for sale, markets, transports or acquires for commercial meanings or mediation purposes, goods or plant material which are produced, cultivated or distributed under the circumstances stated in the previous subparagraph.”*

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<sup>51</sup> Article 4 and 5 of Law 1032 – Amending Article 306 of the Criminal Code (2006)

From the amendment of the Penal Code it can be concluded that penalties created in the first place for patents are also now applicable to varieties protected by plant breeders' rights; which means that the use of farm-saved seeds of protected varieties is illegal and is punishable by imprisonment for 4 to 8 years and a fine of 26.66 to 1,500 minimum monthly wages. It is not clear if the amendment is a result of the FTA. This is highly unlikely because the FTA was signed in November 2006 and the amendment took place in June 2006. In addition, the national law of Colombia already provided plant breeders' rights by implementing Decision 345; this enforcement provision is therefore not a strange development. The Colombian farmers' organisation, Grupo Semillas, states that this change is extremely damaging to farmers and that the change has been gone largely unnoticed in the country (Grupo Semillas, n.d).

### ***3.2.5.3 Recent partially compliance to the FTA***

In 2013 the Colombian government introduced Law 1648 on enforcement measures for IPRs, to comply with the FTA provisions<sup>52</sup>. The law adapted to the FTA provisions in relation to information request, destruction of infringing products or counterfeit products and compensation for damage. The law allows the competent authority to order the defendant to provide any information in its possession in relation to the infringement, notwithstanding the provisions of the Colombian Constitution. In addition, by doing so the ICA may grant an injunction. With regard to the destruction of infringed goods the law provides the ICA the power to order the infringed goods and used materials and tools to be destroyed without compensation. Article 3 of the law offers the possibility for the right holder to claim pre-established damages. At last the law repeals all provisions which are contrary.

Despite the fact that the aforementioned enforcement provisions do not apply to plants and plant materials patents, because plants and plant material are not allowed to be patented in national law, the enforcement provisions do apply to protected varieties under the plant breeders' rights.

### **3.2.6 UPOV 1978 Convention**

As discussed in section 3.4 it is agreed in the FTA to accede to UPOV 1991 Convention. However, Colombia accede to UPOV 1978 in 1996 and still is a member of this prior Convention. In the following sections the main provisions of the UPOV 1978 Convention are discussed.

#### ***3.2.6.1 Scope, requirements and duration of protection***

Protection applies to all botanical genera and species but it is obliged to require protection from 5 at time of accession and to 24 after 8 years<sup>53</sup>. Furthermore the agreement provides preclusion of dual protection with breeders' rights and patents, which means that a variety may be protected as a patent or under plant breeders' right, but both is not allowed. To be eligible for protection under the 1978 Act a variety must be: (1) new, (2) distinct from existing or commonly known varieties, (3) homogenous

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<sup>52</sup> Law 1648 (2013)

<sup>53</sup> Article 4(1) till Article 4(3) of the UPOV 1978 Convention

or uniform and (4) stable<sup>54</sup> (UPOV, n.d.). The variety must not be sold before. The variety must be distinct from existing varieties, which means the variety must be distinguishable in one or more important characteristics from any other variety whose existence is a matter of common knowledge. The third requirement is homogenous or uniform, which means the variation shown by a variety, must be as limited as necessary to permit an accurate description and assessment of distinctness and to ensure stability. Finally the variety must be stable, which means that the characteristics of the variety must be uniform over time, after repeated reproduction or propagation. If the requirements are met the protection term under UPOV 1978 is 18 years for grapevines and trees and 15 years for all other plants<sup>55</sup>.

### *3.2.6.2 Exclusive rights on seeds and propagating material*

The 1978 Act provides protection for variety's seeds and other propagating material, as well as the entire plants. The breeder has the authorization in respect to seeds and other propagating material of the protected variety to require authorization for production for commercial marketing, offering for sale and marketing<sup>56</sup>.

### *3.2.6.3 Breeder's exemption and farmers' privilege*

The breeders' exemption, to use a protected variety as an initial source for the purpose of creating other varieties or for the marketing of such varieties, is provided by the UPOV 1978 Convention. It states that the authorization of the breeders is not required in this case<sup>57</sup>. This means protected new varieties are permitted to be used to create new varieties and to place on the market.

As discussed in section 3.4.3.1 the rights of the breeders under UPOV 1991 also apply to stocking of plants and seeds, but an optional exception is made by the farmers' privilege. The breeders' rights of the UPOV 1978 Convention does not apply to the broad field as agreed in UPOV 1991 Convention, as described in section 3.4.3.1. Therefore the breeders' rights do not apply to stocking in UPOV 1978, which makes the exception provided by the farmers' privilege not necessary because the farmers can always save plants and seeds of protected varieties.

Colombia accedes to UPOV 1978 but there is no national law specifying the aforementioned provisions. The law in place in Colombia on plant breeders' rights is Decision 345. The national implemented Decision is however, in line with the provisions required by UPOV 1991, elaborated on in section 3.1.2 and 3.2.2.

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<sup>54</sup> Article 6 of the UPOV 1978 Convention

<sup>55</sup> Article 8 of the UPOV 1978 Convention

<sup>56</sup> Art. 5(1) of the UPOV 1978 Convention

<sup>57</sup> Article 5(3) of the UPOV 1978 Convention

### 3.2.7 Constitution of Colombia and Constitutional case ruling

The Constitution of Colombia of 1991 “[...] specifically guarantees that the State shall protect intellectual property for the time and through the formalities prescribed by law”<sup>58</sup>. However it does not say substantively how IPR is protected. Article 150 of the Constitution of 1991 states, that it is the responsibility of Congress to enact laws, inter alia, patents, trademarks and other forms of IPR. The Colombian Constitutional Court is in charge of guarding the Colombian Constitution and is the highest entity in the Colombian judicial branch of government with the function of interpreting and monitoring the constitutional law and processes (Nagle, 1995). The Constitutional Court has the function of reviewing legislation and approving international treaties (Cadavid, 2014). The Constitution of Colombia ruled in 2012 on the accession of the Colombian government to the UPOV 1991 Convention which they did by acceding Law 1518 in April 2012.

In May 2012, the FTA between Colombia and the US entered into force. The first article of the ‘Intellectual Property’ chapter of the FTA obliges for both parties to ratify or accede to several international IP treaties including the 1991 Act of the International Convention for the Protection of New Varieties of Plants (UPOV 1991 Convention). Law 1518 of 2012, which was enacted to meet the obligation of the FTA, approved the 1991 UPOV Convention in Colombia (Cadavid, 2014; Rincon, 2013).

After acceding to UPOV 1991 Convention the Colombian civil society denounced the fact that the law had been passed without regard of the Constitution of Colombia, which obligates the government to guarantee the rights of everyone under its jurisdiction and, more specifically, to preserve the country’s food sovereignty and security. Based on these criticisms, a number of organisations appealed to the Constitutional Court and, in December 2012, obtained a decision declaring Law 1518 unenforceable. GRAIN (2013[1]) states that the opponents argued UPOV 1991 should be halted because the government failed to consult indigenous and tribal peoples in regard to legislative or administrative measures affecting them directly.

In the ruling of December 2012 the Constitutional Court ruled that the UPOV 1991 Convention violated the Constitution because indigenous and Afro-Colombian ethnic groups who could be affected by the ruling were not consulted. The Court based its ruling on the Indigenous and Tribal Peoples Convention of the International Labor Organisation (ILO), Convention 169. Article 6(1) of ILO Convention 169 provides that governments must “consult the peoples concerned, through appropriate procedures and in particular through their representative institutions, whenever consideration is being given to legislative or administrative measures which may affect them directly.” (Case law: Sentencia C-1051/12) (Cadavid, 2014; Sullivan, 2012).

However it is not the first time that the Colombian Court has expressed its view over the effects of plant varieties protection laws. In 1996 the UPOV 1978 was found constitutionally. In the

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<sup>58</sup> Article 61 of the Constitution of Colombia

consideration of the Constitutional Court, the Court considered the importance of consulting minority groups, such as indigenous peoples and Afro-Colombian communities. According to the Court, the disruption of traditional farming practices can harm minority communities by causing cultural disintegration, malnutrition and diminished health and well-being and can threaten the very survival of those minority populations (Case law: Sentencia C-262/96; Sullivan, 2012).

It seems that Court ruling on the accession to UPOV 1991 was not based on the content of the agreement and to its potential effects these might have, but only on the lack of consultation of minority groups before the accession takes place. It is an interesting finding, as Geigner (2015) points out those international treaties are often rejected as incompatible with the constitutional system and he uses the Colombian ruling on UPOV 1991 as an example.

## 4. Comparative analysis

To be able to value the content of the TRIPs-plus provisions of the FTA and the regional and national regulations, a comparative legal analysis is conducted between these different levels of regulation. In chapter 3 the regulations of the FTA were analysed in relation to the TRIPs Agreement. Afterwards the regional and national regulations of Colombia were demonstrated. In this chapter a comparative analysis is conducted to see in to what extent the provisions of the FTA were new to Colombia and which ones were already adopted before the FTA was signed. The FTA was signed in 2006 but, did not enter into force until 2012; national legal amendments of Colombia in the years in between could be a result of adapting to the FTA.

The analysis is divided into different subjects in relation to protection of plants and plant materials<sup>59</sup>. Starting with the analysis of protection by patents (section 4.1), after which the plant breeders' rights are analysed (section 4.2). At last the smaller remaining topics are discussed (section 4.3).

### 4.1 Analysis of patents

Patents can be granted on inventions and in some countries plants and seeds are seen as inventions as well. In other areas the definition on an invention is expanded to discoveries, which make patents of plants and plant materials optional as well. If and how plants and plant materials are made patentable or not within the FTA and in national law is demonstrated in previous chapters, in following sections the provisions on patentability of plants and plant materials, as well as the patent enforcement regulations on the different levels of regulations are compared.

#### 4.1.1 Scope, requirements and exceptions of patents

According to the TRIPs Agreement members, have the possibility to exclude patents on plants and plant materials<sup>60</sup> and create the exceptions for patenting if it interferes with the protection of humans, animals, plant life, health or to avoid serious harm to the environment. However, the TRIPs Agreement does state that there has to be a system in place to protect plant varieties (which is discussed in section 2.1). Therefore TRIPs states that plant variety protection has to be granted by patents or by an effective *sui generis* system or by a combination of both. The FTA, on the other hand, provides the possibility of plants and plant material patents. The FTA states that parties should take all reasonable efforts to provide patents for plants, but it does not oblige the patentability of plants and plant materials. Within the FTA the requirements for granting a patent are better defined, 'inventive

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<sup>59</sup> Subjects are based on findings of TRIPs-Plus provisions of chapter 4 and partially on previous research of **Jefferson, Camacho, Chi-Ham (2014), Tripp, Louwaars and Eaton (2007) and Vivas-Eugui (2003)**.

<sup>60</sup> Next to plants and seeds, Members can also exclude diagnostic, therapeutic and surgical methods for the treatment of humans or animals, animals (other than micro-organism), and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes as well (Article 27(2) and (3) TRIPs Agreement.

step' and 'capable of industrial applications' are seen synonymous for 'non-obvious' and 'useful'<sup>61</sup>, which set a broad scope for the requirements. If this is broader than TRIPs cannot be argued, because the TRIPs Agreement leaves space for different interpretations. Within the TRIPs Agreement inventions may be excluded from patentability if it interferes with the protection of humans, animals or plant life or health or to avoid serious prejudice to the environment. Members of the TRIPs Agreement may also exclude plants and animals other than micro-organisms, and essentially biological processes for the production of plants or animals other than non-biological and microbiological processes from patentability<sup>62</sup>. This exception is left out in the FTA. Moreover, the FTA adds that if exceptions are granted they may not unreasonably conflict with a normal exploitation of the patent and not prejudice interfere in the interest of the patent owner<sup>63</sup>. The national regulation in respect to the patentability of plants and plant material has not changed since the FTA was signed, which means that national law still does not provide patents for plants and plant material.

If patents on plants and plant materials are made available by the member state than the protection granted for patents in the TRIPs Agreement will apply. According to the TRIPs Agreement the protection granted for patents shall not end before the expiration of a period of twenty years counted from the filing date<sup>64</sup>. The same term was adopted in the regional regulation in 2001<sup>65</sup>. The FTA does not provide information on the duration of protection, which means the term of the TRIPs Agreement would apply<sup>66</sup>. The FTA does however provide compensation for unreasonable delay by restoring patent term or patent rights<sup>67</sup>. This is to the benefit of the patent owner, but overall the duration of patents does not differ from the TRIPs Agreement and neither from the patent duration provided in the national regulation.

In short, in relation to the scope of patents the FTA does not require strong TRIPs-Plus provisions with regard to plants and plant materials. Meaning that the FTA provides that all reasonable efforts have to be taken to provide plants and plant material patents but, the FTA does not oblige the patenting of plants and plant material. Therefore Colombia is not obliged to make patents of plants and plant material available. The FTA does decrease the provided exceptions of TRIPs. This might harm humans, animals, plant life or the environment, because the exception of patentability if aforementioned areas are at stake is left out in the FTA. The duration of the patent was not increased by the FTA compared to TRIPs. Colombia still does not provide patents on plants and plant materials in national law. This is possible because the FTA only requires that Colombia should take reasonable efforts and does not oblige the patenting of plants and plant material. Nevertheless, it is interesting to analyse the national patent regulations in Colombia and their enforcement (section 4.1.2), because the

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<sup>61</sup> Article 16.9.1 of the FTA

<sup>62</sup> Article 27.2 and 27.3 of the TRIPs Agreement

<sup>63</sup> Article 16.9.3 of the FTA.

<sup>64</sup> Article 33 of the TRIPs Agreement

<sup>65</sup> Decision 486 of the Andean Community

<sup>66</sup> As decided in Article 16.1.6 of the FTA

<sup>67</sup> Article 16.9.6(b) of the FTA

language used in the FTA might be interpreted differently. Depending on the interpretation it could be possible the US might force Colombia to modify this national law in the future. If this is not the case it could be highly possible that the interest for patents on plants and plant material is not of high interest to the US. Whether the US is interested in patents on the genetics of plants and plant material is outside the scope of this research, but it would be highly interesting to explore this in further research.

#### **4.1.2 Enforcement of patent protection**

As explained in the previous section Colombia does not provide patents on plants and plant material. Because patent enforcement regulations might apply to plants and plant material in the future, the enforcement regulations are still analysed.

The general obligation of the enforcement provisions is slightly different from the TRIPs Agreement. Within the FTA it is compulsory to make judicial decisions and administrative ruling public, as well as publication of the efforts to provide effective enforcement on IPR; this is however a minor difference and this difference is not the TRIPs-Plus provision referred to by opponents of the FTA.

In section 2.3.2 civil and administrative procedures and remedies of the TRIPs Agreement and the FTA are demonstrated. TRIPs as well as the FTA provide the obligation to seize devices and products suspected of being involved in a prohibited activity and dispose materials which are involved. However, TRIPs does not provide disposal as a provisional measure, which is provided in the FTA. The same applies to the provision that regulates compensation for the right holder; this is made comprehensive as opposed to the TRIPs provisions. In relation to criminal procedures and remedies TRIPs is unclear if sanctions apply to patent and PBRs infringement. Members may provide criminal procedures and penalties to other cases of IPRs, but are not obliged as for trademark and copyright infringement. The FTA, on the other hand, is very clear in its remedies in relation to all kind of IPRs and obliges seizure and destruction of counterfeit goods and related material<sup>68</sup>. On national level the administrative and criminal procedures and remedies for patent infringement are incorporated into national law by the Penal Code of 2000 and the Commercial Code of 1972. The Penal Code includes imprisonment and fines as penalties for patent infringers. The Commercial Code allows seizure of machinery and equipment as a preventive measure, as well as the FTA does many years later. Both the Penal Code and the Commercial Code provided strict penalties for patent infringement before the FTA was signed. In addition, the Colombian government introduced Law 1648 in 2013 on enforcement measures for IPRs in relation to information request, destruction of infringing products or counterfeit products and compensation for damage. The law was introduced to coincide with the provisions of the FTA.

Because patents on plants and plant materials are not yet made available, there are no plants or plant material patents to be enforced. The Colombian government provides stricter provisions on

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<sup>68</sup> Article 16.11.27 of the FTA

patent enforcement than agreed in TRIPs. However, enforcement regulations of the FTA apply to all IPR, including PBRs. In addition, Colombia implemented Law 1648 in 2013 to comply with the FTA (please see section 4.2.3 for the elaboration of Law 1648).

## 4.2 Analysis of plant breeders' rights

As discussed in the previous section, the TRIPs Agreement members have to provide a system for the protection of plants; this can be by patents or another effective *sui generis* system or both. Nothing else on this topic has been included in the TRIPs Agreement. Colombia agreed to a system to protect plant varieties, by becoming a member of the UPOV 1978 Convention. The FTA, however, requires acceding to UPOV 1991 Convention for the protection of plant breeders' rights. It has to be kept in mind that UPOV Conventions provide minimum requirements; the national law<sup>69</sup> can implement stricter provisions if desired. Therefore the following paragraphs focus on the comparison of the provisions on the plant breeders' rights, by the UPOV Conventions and the national law.

### 4.2.1 Scope, requirements and duration of plant breeders' rights

One of the differences between UPOV 1978 and UPOV 1991 is the scope of the two Conventions. The plant breeders' rights of UPOV 1991 may be applied to all botanical genera and species, while UPOV 1978 only requires protection for 5 to 24 varieties. However, the nationally implemented Decision 345 provided by the Andean Community provides the same scope as required by the UPOV 1991 Convention.

The requirements for granting the plant breeders' rights in both Conventions mean that a variety must be (1) new, (2) distinct from existing or commonly known varieties, (3) homogenous or uniform and (4) stable. However the meaning on the concept 'new' differs a little. UPOV 1978 states that a variety is 'new' when it has not been offered for sale and whose existence is not a matter of common knowledge. UPOV 1991 defines 'new' as a variety that must not have been sold or disposed to others for more than one year prior to the application for a breeders' right and therefore leaves out the idea on common knowledge as included in the definition in UPOV 1978<sup>70</sup>. This means that varieties that are used by farmers for their own produce but not have been sold on the market, are eligible for protection. The national law provides the same four requirements and defines 'new' as a variety that has not been offered for sale<sup>71</sup>. In addition, it states that "*Novelty shall not be lost through sale or disposal of the variety to others*"<sup>72</sup>. With regard to the requirements for plant breeders' rights the national provisions are already in line with UPOV 1991, years before the FTA was signed.

If requirements are met the breeder's right of UPOV 1991 grants a protection no shorter than 20 years from the date of the grant of the breeder's right. For trees and vines, the said period shall not

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<sup>69</sup> Colombian national law on plant breeders' right is Decision 345 of the Andean Community

<sup>70</sup> See section 5.2.4.1

<sup>71</sup> Decision 345 - Common Provisions on the Protection of the Rights of Breeders of New Plant Varieties (1993)

<sup>72</sup> Article 4 of Decision 345

be shorter than 25 years from the said date<sup>73</sup>. This has been extended compared to UPOV 1978, which provides 18 years for grapevines and trees and 15 years for all other plants<sup>74</sup>. Decision 345 provides 20 to 25 years in the case of vines, forest trees and fruit trees, including their rootstocks, and from 15 to 20 years for other species. However in 2002, Colombia amended the protection term in 2002<sup>75</sup> after which it became 25 years for trees and grapevines and 20 years for the other plants, which is almost in line with UPOV 1991.

The above paraphrases remarkably show that the scope, requirements and duration of plant breeders' rights in national law were already in line with the provisions of UPOV 1991, years before UPOV 1991 was required by the FTA.

#### **4.2.2 Exclusive rights for breeders**

Under UPOV 1978 the breeders have permission, in respect to seeds and other propagating material of the protected variety, to require authorization for production of commercial marketing and offering for sale and marketing. Within UPOV 1991 these rights have been extended to production and reproduction, conditioning for the purpose of propagation, offering for sale, selling or marketing, exporting, importing and stocking for any of the purposes mentioned before<sup>76</sup>. In addition the rights are not only applicable to seeds and other propagating materials but also for harvesting material. From previous mentioned provision it seems that the use of farm-saved seeds and harvesting material of protected varieties is prohibited without consent of the breeder in UPOV 1991. However, the UPOV 1991 Convention does provide an optional exception, called the farmers' privilege. The farmers' privilege restricts the rights of the breeders, as mentioned above, within reasonable limits and permit farmers to use the protected variety on their own land for harvesting and reproduction for their own use. Within UPOV 1978 the right of the breeders does not include to use of farm-saved seeds and other propagating material, therefore no farmers' privilege is needed. Despite the provisions on farmers' privilege the UPOV 1991 Convention is still much more restricted in the use of farm-saved seeds than is agreed in the Convention of 1978.

In addition, the system Colombia accedes to, UPOV 1978, only provides protection for plant varieties under this Convention and prohibits patents on varieties at the same time. Under UPOV 1991 this prohibition was dissolved, which makes it possible to have a new variety patented and protected under plant breeders' rights. However, patents on plants and plant material are not made available by national law in Colombia. Acceding to UPOV 1991 does not automatically result in the approval of plants and plant material patents. Because Colombia does not provide patent protection for plants and plant materials, the left out provision does not have any direct influence.

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<sup>73</sup> Article 19 of the UPOV 1991 Act

<sup>74</sup> Article 8 of the UPOV 1978 Convention

<sup>75</sup> Decree 533 (2002)

<sup>76</sup> Article 14(1) of the UPOV 1991 Act

The breeders' exemption, to use a protected variety as an initial source for the purpose of creating other varieties or for the marketing of such varieties, is provided by the UPOV 1978 Convention. It states that the authorization of the breeders is not required in this case<sup>77</sup>. The UPOV 1991 Convention states that breeders' rights shall not extend to privately and non-commercial purposes, experimental purposes and for the purpose of breeding other varieties<sup>78</sup>, which means protected varieties are allowed to be used for the purpose of creating new varieties. The essentially derived varieties, however, are excluded from this exception. Therefore breeding and exploitation of variety essentially derived from an earlier variety require the right holder's authorization. The national regulation provides the breeders' exemption as well. Article 24 of Decision 345 provides the acceptance of the use of a protected variety for creating a new variety, but makes an exception for essentially derived varieties, except when the latter variety in itself is an essentially derived variety. In short, the national regulation on breeders' exemption is in line with the UPOV 1991 Convention.

Looking further into the national law in relation to this section, Article 24 of Decision 345 provides similar rights for breeders with regard to seeds and harvesting material<sup>79</sup> as in UPOV 1991. Both require with regard to seeds and harvesting material of the protected variety authorization for production and reproduction, conditioning for the purpose of propagation, offering for sale, selling or marketing, exporting, importing and stocking for any of the purposes mentioned before. Article 25 of Decision 345 provides an exception of the plant breeders' rights for the breeding and exploitation of a new variety, the breeders' exemption. The decision also provides the farmers' privilege, which states that farmers are allowed to use farm-saved seeds for their own use, commercial use is not allowed. Therefore, the use of farm-saved seeds is not prohibited but nevertheless limited, which is the same as is provided in the UPOV 1991 Convention. It is interesting that the concerns raised by the documentary and GRAIN only focus on recent developed regulations which are, as they claim, a result of the FTA. The provisions of national Decision 345 demonstrates that strong national regulations were already in place in Colombia.

One of the explanations could be that before the FTA was signed Colombians did not protect varieties on a large scale, but this is questionable since the UPOV database shows large amount of plant varieties application starting in 1995, years before the FTA was signed<sup>80</sup>. Another possibility could be that Decision 345 has not been enforced as strictly as the US companies now try to enforce the FTA provisions, because enforcement is not only the result of the available legal remedies on a national level but it is also matter for breeders to enforce their rights. However, this seems unlikely because the US only owns 5% of the total amount of PBRs certificates in Colombia (UPOV, 2014). To view the enforcement of plant breeders' rights, please see section 4.2.3.

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<sup>77</sup> Article (5)(3) of the UPOV 1978 Convention

<sup>78</sup> Article 15(1) of the UPOV 1991 Act

<sup>79</sup> Article 24 of Decision 345

<sup>80</sup> PLUTO: Plant Variety Database. Provided by UPOV: <https://www3.wipo.int/pluto/user/en/index.jsp>

### 4.2.3 Enforcement of plant breeders' rights

The FTA is very clear in its remedies in relation to all kind of IPRs and obliges seizure and destruction of counterfeit goods and related material<sup>81</sup>. Therefore civil and administrative procedures and remedies apply also to PBRs. As demonstrated in section 4.1.2 it provides the obligations to seize devices and products suspected of being involved in a prohibited activity and dispose materials which are involved. In the TRIPs Agreement the criminal procedures and remedies are only differently formulated but are technically the same. However, TRIPs does not provide disposal as a provisional measure, which is provided in the FTA. In addition, TRIPs is unclear if sanctions apply to patent and plant breeders' right infringement.

In both the FTA and in the TRIPs Agreement infringers have to pay damages to the right holder for the injury he suffered as a result of the infringement. Within both TRIPs and the FTA damages are included to compensate for the injury of the right holder, but in addition, within the FTA it is possible for the right holder to claim pre-established damages, which shall be available on the election of the right holder as an alternative to actual damages.

The UPOV Convention requires Members to provide for appropriate legal remedies for the effective enforcement of breeders' rights, but does not provide the exact requirements. Therefore enforcement of plant breeders' rights is up to the national authority. In Colombia the ICA has been given this task. Furthermore, the Colombian government amended the Penal Code in 2006 and thereby made fraudulent infringement of IPRs, including plant variety rights a crime punishable by a fine of 26.66 to 1,500 monthly wages and 8 years in prison<sup>82</sup>. The amendments were before the FTA was signed by both parties, therefore the amendment is probably not a result of the provisions of the FTA.

In 2013 the Colombian government introduced Law 1648 on enforcement measures for IPRs, to comply with the FTA provisions. The law, which applies to plant breeders' rights, state with regard to the destruction of infringed goods that the ICA has the power to order destruction of the infringed goods and used materials and tools without compensation. Article 3 of the law offers the possibility for the right holder to claim pre-established damages.

In addition to the provided legal enforcement provisions, it is a matter for breeders to enforce their rights. As the European Commission points out, the effectiveness of enforcement in developing countries is often not in line with the TRIPs standards. The shortcomings which may be noted in many developing countries' enforcement regulations, including the way in which law enforcement authorities are operating, may be seriously detrimental to companies facing infringements of their rights in these countries. This is why, according the European Commission, the inclusion of adequate enforcement provisions in FTAs is often crucial (European Commission, 2012). As the Congressional Research service of the US governments in a report states, is that enforcement of IPR is pursued through FTAs (Ilias and Fergusson, 2011). As is provided on the website of the Office of the United

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<sup>81</sup> Article 16.11.27 of the FTA

<sup>82</sup> Article 4 of Law 1032

States Trade representative (USTR), the US is the world's largest economy and the largest exporter of goods and services. The US agricultural exports supported an estimated 929 thousand jobs on and off the farm in 2012<sup>83</sup>. On the website of US Chamber of Commerce it is stated that IP contributes enormously to the national and state economies. The IP of the US is worth 5.8 trillion dollar, more than the nominal GDP of any other country in the world<sup>84</sup>. The website of Export.gov, which is a website in support of US export companies, states that the US is Colombia's largest trading partner and Colombia was the 22nd largest market for US exports in 2012<sup>85</sup>, which shows the trade imbalance between the two countries. US exports to Colombia in 2013 topped 16 billion dollar, an increase of more than 14 percent over 2012. Therefore the US has a stronger incentive to require strong enforcement regulations, especially in developing countries.

### 4.3 Others

Next to the two clearly distinguishable ways of protection, there are some smaller elements highly interesting and related to plants and plant material protection as well; which are included in the FTA or in national law. These are discussed in the sections below.

#### 4.3.1 Information protection of agricultural chemical products

As well as plants, agricultural chemical products can be protected and in addition the information needed to guarantee safety and efficiency of the chemical product can be protected as well. The provisions are already provided by TRIPs and are protected in a higher extend in the FTA. The FTA adds that it is not allowed to authorize another to market the same or similar product based on submitted information and evidence of the marketing approval for at least 10 years. Neither is it allowed to use this information, without the consent of the patent owner, to obtain marketing approval in another country<sup>86</sup>. The national law provided information protection for 10 years as in TRIPs. However, in 2012 the national regulation on information protection of agricultural chemical products was changed to be in line with the requirements of the FTA. Therefore the FTA provisions are implemented in national law, which means that patent owners of agricultural chemical products obtain a higher protection. Despite that this is a TRIPs-Plus provision and its implementation in national law, this provision is not referred to in the concerns raised. It provides more protection with regard to the information needed to guarantee safety and efficiency of the patent; agricultural chemical products were already patentable by the TRIPs Agreement. Therefore, this small TRIPs-Plus provision will not affect a lot of Colombian farmers. The exclusion of this provision from the claims, which focus on the large impact on Colombian farmers, is therefore justifiable.

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<sup>83</sup> <https://ustr.gov/about-us/benefits-trade>

<sup>84</sup> <http://www.theglobalipcenter.com/resources/why-is-ip-important/>

<sup>85</sup> <http://www.export.gov/colombia/marketresearchoncolombia/countrycommercialguide/index.asp>

<sup>86</sup> Article 16(10)(b) of the FTA

### 4.3.2 Provisions on seed certification

As discussed in previous sections the use of farm-saved seeds is limited in the Convention of UPOV 1991 and by Decision 345. The FTA and neither the UPOV 1991 Convention, agreed upon by the FTA, discuss the introduction of a seed certification system, which ensure the quality of seeds, whereby seed intended for marketing is subject to official control and inspection. Seed certification systems control the production, multiplication, import, export, distribution and marketing of seeds and harvesting material in the country, preserving the quality of seeds, in order to ensure the quality of the material produced and marketed. ICA established a control system for seeds in 2003 with the introduction of Resolution 2046. This resolution already permitted farmers with a farm less or equal to five hectares to save seeds of a variety protected by inter alia plant breeders' rights and it is in no case possible to sell these seeds to third parties (Worldbank, 2006). In 2010 the ICA revised the resolution<sup>87</sup> in which the production, packaging, import, export, storage, sale, transfer or use of seeds and harvesting material of all botanical genera and species for planting cultivars obtained through techniques and conventional breeding methods are controlled and seeds are obliged to be certified.

Both resolutions limit the use of farm-saved seeds and both provide a certification system for selling and marketing of seeds. However, the certification under Resolution 970 is made compulsory, which means uncertified seeds are not allowed to be sold or marketed.

An explanation for the revolt on Resolution 970 is that the resolution might be much more strongly enforced by the ICA. The revolt was further reinforced by the documentary of Solando and Cartolano which showed the destruction of seeds as a result of this Resolution. The ICA clarifies on their website that Resolution 970 of 2010 regulates the production and marketing of improved seeds. It also states that this regulation does not regulate the use of local and regional native seeds by small farmers, nor does it prevent crop saved which farmers are entitled to (ICA, n.d.).

### 4.3.3 Accession to related treaties and agreements

In the FTA Colombia and the US agreed on accession to several international agreements and treaties. Some of which related to plant material protection and are potentially related to the concerns raised. Colombia acceded to the Budapest Treaty in 2012 as is required by the FTA. The Patent Cooperation Treaty is also required, but was already in place in Colombia since 2001. The Budapest Treaty and neither the Patent Treaty 2000 has been implemented in Colombia yet. The latter focus on the harmonization of formal procedures in respect of national and regional patent applications and patents and therefore make such procedures more user friendly. The Budapest Treaty allows or requires the deposit of microorganisms for the purposes of patent procedure.

In the FTA where both parties have agreed on is the accede to UPOV 1991 required. Colombia is a member of UPOV 1978 and has tried, as a result of provisions of the FTA, to accede to UPOV 1991 however with no success. The Colombian president has tried to implement UPOV 1991,

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<sup>87</sup> Resolution 970 (2010)

but because of high resistance led to a Court case which was lost, at the moment UPOV 1978 is still in place. The case, where accession of UPOV 1978 was at stake, is analysed in section 3.3.4.

It is clear that treaties Colombia did not implement nationally, are not the cause of the concerns raised by the documentary and GRAIN, therefore these will not be further discussed in the analysis of the claims in the next chapter.

#### **4.3.4 Related National Court Cases**

The Constitutional Court case on the occasion of the accession to the UPOV 1991 Convention showed interesting findings as the Court declared the implementation of UPOV 1991 in Colombia unconstitutional. The Constitutional Court ruled that the UPOV 1991 Convention violated the Constitution because indigenous and Afro-Colombian ethnic groups who could be affected by the ruling were not consulted (Case law: Sentencia C-1051/12) (Cadavid, 2014; Sullivan, 2012). The same viewpoint was taken during the accession to UPOV 1978. Interesting about the ruling is that it seems that it was not based on the content of the agreement and to its potential effects, but on the lack of consultation of minority groups in advance only. Because it is not the content which is the problem, it is very likely that the next time Colombia tries to accede to UPOV 1991 Convention it will go through. An interesting finding, as Geigner (2015) points out that international treaties are often rejected as incompatible with constitutional system and he uses the Colombian ruling on UPOV 1991 as an example. In addition, despite the fact that UPOV 1991 is declared unconstitutional, the remaining national regulations on plant breeders' rights such as Law 1032 of 2006 of the Penal Code, as well as Decision 345, are still in place.

## 5. Discussion

In the previous chapters the provisions on the protection of plants and plant material of the TRIPS agreement, the FTA, the Andean Community and the Colombian national government and institutions are elaborated on and compared to each other. The task of this research, however, is to analyse if legal claims made by opponents of the FTA between Colombia and the US in relation to the protection of plants and plant material are grounded. This is done by comparing the findings of previous chapters with the claims derived from the documentary of Solano and Cartolano and the article by farmers' organisation GRAIN<sup>88</sup>. Eventually one final general legal claim will be analysed from the viewpoint of plants and plant material protection in Colombia. The concerns the documentary of Solano and Cartolano (A, B, C) and GRAIN (D and E) expressed are the following:

- A) In the FTA the US demands Colombia to create a law that forced Colombian farmers to only plant certified seeds;
- B) As a result of the demands of the US in the FTA the Colombian Institute of Agriculture issued a resolution called 970;
- C) The 970 resolution protects the copyright laws of the companies that produce and therefore considers that farmers reusing seeds are violating the copyright law of the producing company and therefore forcing the farmers to buy seeds every time they plant.
- D) Colombia was forced to adopt UPOV 1991 by the US;
- E) UPOV 1991 has the – ultimately - purpose to replace indigenous seeds with commercial seeds from foreign companies;

The legal claim A, B and C relate to Resolution 970. Therefore these claims are discussed together in section 5.1. Claim D and E refer to UPOV and are therefore discussed together in section 5.2.

### 5.1 Analysis of claim A, B and C

The analysis on the FTA provisions in chapter 2 demonstrates that the FTA contains TRIPs-Plus provisions with regard to plants and plant material protection. However, the claims made in the documentary and GRAIN provides a one-sided view of the regulations in Colombia. The national regulations are not taken into consideration, some of which as strict or stricter than is required in the FTA.

With regard to the claim A and B it can be concluded that the text of the FTA does not require the implementation of Resolution 970 which obliges the certification of seeds. It is agreed in the FTA to accede to UPOV 1991, which limit the use of farm-saved seeds of protected varieties. However the national law already provided the restriction on the use of farm-saved seeds of protected varieties since 1994 by the implementation of Decision 345 of the Andean Community. Moreover, the decision requires a national competent authority to enforce the regulations. The ICA was appointed and the

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<sup>88</sup> GRAIN (2013). "Seed laws in Latin America: the offensive continues, so does popular resistance".

institute required all commercially used seeds must be certified (Resolution 970). Resolution 970 was not the first regulation on seed certification. Resolution 2046 of 2003 regulates and controls the production, multiplication, import, export, distribution and marketing of seeds and harvesting material in the country, preserving the quality of seeds for sowing, in order to ensure the quality of the material produced and marketed. The resolution includes seeds of varieties which are protected by plant breeders' rights<sup>89</sup>. In addition, the resolution permitted the use of farm-saved seeds on farms less or equal to 5 hectares, but selling is prohibited. This resolution makes selling of protected varieties illegal long before the FTA was signed.

In addition, legal authorities should provide enforcement provisions. Colombia amended the Penal Code before the FTA was signed and thereby made fraudulent infringement of IPR and plant variety rights a crime punishable by a fine and 8 years in prison.

In short, the national regulation was already in line with the requirements in the FTA and the demand to only use certified seeds is a request of the national resolution, which is not requested by the FTA. Therefore, claim A and B are considered biased and incorrect. In addition, enforcement provisions were already made stricter in the Penal Code before the FTA was signed.

The third claim discussed is: *“The 9.70 resolution protects the copyright laws of the companies that produce and therefore considers that farmers reusing seeds are violating the copyright law of the producing company and therefore forcing the farmers to buy seeds every time they plant”*. The national Resolution 970 provides a seed certification system in which the quality of seeds is controlled. However, this does not relate to copyrights. Plants and plant material can be protected by patents or by plant breeders' rights (or a combination of both) as demonstrated in chapter 3 and in Colombia only PBR is made available. Copyrights are not related to seed certification, nor to protection of plants and plant materials. The validity of the third legal claim therefore would be false.

In the possibility copyrights are confused with plant breeders' rights the claims would state that reusing seeds would violate the plant breeders' rights and therefore force the farmers to buy seeds every time they plant. This claim could be valid depending on the kind of perspective. If only UPOV 1991, required by the FTA, is taken into account, plant breeders' rights limit the use of protected varieties but farmers are not obliged to buy certified seeds or seeds from protected varieties. UPOV only provides protection and limited use for protected varieties (farmers' privilege), this allows farmers to use all varieties which are not protected and to use farm-saved seed of protected varieties for their own use. This would be the perspective if UPOV 1991 was implemented; however, the Constitutional Court declared the accession unconventionally. The national law however, already provided protection which was similar to UPOV 1991 (except from a minor difference in the duration of protection).

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<sup>89</sup> Article 19 of Resolution 2046

If we approach the same claim with the view of the national regulations, the claim is valid. The national implemented Decision 345 provides exclusive right for breeders for production and reproduction, conditioning for the purpose of propagation, offering for sale, selling or marketing, exporting, importing and stocking. In short, the limitations on the use of farm saved-seeds of protected varieties was not introduced by UPOV 1991 in Colombia, but was already limited by national law since 1994. In addition, Resolution 2046 of 2003 provides a seed certification system, which only permits farmers with a farm less or equal to 5 hectares to use farm-saved seeds of certified and protected varieties. In 2010 Resolution 970 was introduced, this resolution provides a system that protects certified and protected varieties and allows only the use of the seeds of these varieties. Only farm equal or less than five hectares are allowed to use farm-saved seeds of a protected variety, but it is prohibited to sell, market or exchange the seeds. Therefore, the provisions of the national resolutions are stricter than is required by the FTA. From a national point of view the claim is indeed valid, however, should be noted that Resolution 970 is not a requirement of the FTA. In addition, from the aforementioned national resolution it is clear that seed law restriction (Resolution 2046 of 2003) was already in place before the FTA was signed.

With regard to enforcement, legal authorities should provide the appropriate protection, but breeders are responsible to enforce their rights. As demonstrated in section 4.2.3 the US has a strong incentive to enforce IPR stronger because the US is the world's largest economy and the largest exporter of goods and services. The FTA requires strong enforcement provisions. Its remedies in relation to all kind of IPRs obliges seizure and destruction of counterfeit goods and related material<sup>90</sup>. However, stricter provisions regarding plant breeders' rights were already introduced in the amended Penal Code of 2006. If the recent concerns raised by the documentary and GRAIN is a result of US government and/or companies who enforce rights nowadays by other means than the FTA, is beyond the research and should be examined by further empirical research.

## 5.2 Analysis of claim D and E

The farmers' organisation GRAIN has written "*Seed laws in Latin America: the offensive continues, so does popular resistance*" of October 2013, which makes strong statements in relation to UPOV 1991, which Colombia had to comply with according to the FTA. The article states in the first place that the attempt to privatize and monopolize seeds is a result of UPOV and in some extent to national governments as well. Nevertheless some strong statements have been made in the article with regard to UPOV 1991 and the FTA. The claims discussed under this section are claim D: "*Colombia was forced to adopt UPOV 1991 by the US*" and claim E: "*UPOV 1991 has the – ultimately - purpose to replace indigenous seeds with commercial seeds from foreign companies*".

It has to be taken into account that negotiating the FTA the US had a much better bargaining position compared to Colombia based on the power imbalance between the two countries, as

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<sup>90</sup> Article 16.11.27 of the FTA

demonstrated in section 4.2.3. If the accession to UPOV 1991 is initiated by the US cannot be examined from the legal text of the FTA. However, chapter 3 has demonstrated that Colombia already implemented Decision 345 which is as strict as the UPOV 1991 Convention (with a minor differences in the duration granted). Both UPOV 1991 and Decision 345 require with regard to seeds and harvesting material of the protected variety authorization for production and reproduction, conditioning for the purpose of propagation, offering for sale, selling or marketing, exporting, importing and stocking for any of the purposes mentioned before. The decision also provides the breeders' exemption and the farmers' privilege. Therefore, the use of farm-saved seeds is not prohibited but nevertheless very limited, which is the same as is provided in the UPOV 1991 Convention.

Despite the implementation of Decision 345, Colombia had to accede to UPOV 1991, but this led to much resistance whereas the national laws in place were already in line with UPOV 1991. The Constitutional Court ruled that the acceding to UPOV 1991 was unconstitutional because of the lack of consultation of minority groups which might be affected by the accession. The ruling shows that the Court did not rule against the content of the agreement but only on the way the accession was conducted. Therefore the next time Colombia tries to accede to UPOV 1991 there will be a higher chance it succeeds.

In addition, the Penal Code was amended in 2006 and thereby made fraudulent infringement of IPRs, including plant variety rights a crime punishable by a fine of 26.66 to 1,500 monthly wages and 8 years in prison<sup>91</sup>. The amendments were before the FTA was signed by both parties, therefore the amendment is probably not a result of the provisions of the FTA.

Therefore, with regard to the claim D and E it can be concluded that the US had a high incentive to require the accession to the UPOV 1991 Convention. However, if the US forced to include the accession to UPOV 1991 in the FTA cannot be concluded from this research. What is shown from this research is however that the Colombian national law already provided Decision 345 which is very similar to the provisions of UPOV 1991. Decision 345 requires with regard to seeds and harvesting material of the protected variety authorization for production and reproduction, conditioning for the purpose of propagation, offering for sale, selling or marketing, exporting, importing and stocking for any of the purposes mentioned before. The decision also provides the breeders' exemption and the farmers' privilege. With regard to the use of seeds Decision 345 and Resolution 2046 already limit the use of farm-saved seeds of protected varieties. In addition, strict enforcement provisions on fraudulent infringement of plant breeders' rights were already in place. In short, national law already provided commercial seeds and therefore restricted the free use of seeds. Both claims are therefore biased and not leak relevant information of the national regulations already in place.

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<sup>91</sup> Article 4 of Law 1032

## 6. Conclusion

The aim of this research is to gain more insights in the development of regulations on protection of plants and plant material in place in Colombia which might influence Colombian farmers, in order to create a better understanding whether the concerns raised on the United States-Colombia Trade Promotion Agreement (FTA) in relation to the impact on Colombian farmers are correct. This objective is reached through extensive analyses of the legal regulations on different levels concerning plants and plant material protection.

From the first analysis conducted it can be concluded that the FTA contain TRIPs-Plus provisions with regard to protection of plants and plant materials in the area of patent protection and enforcement provisions. In addition, the FTA required the accession to UPOV 1991 Convention for the protection of new plant varieties. The FTA also contains TRIPs-Plus provisions for the protection of the information of agricultural chemical products and requires parties to ratify or accede the Budapest Treaty, the Patent Cooperation Treaty and the Patent Law Treaty of 2000. However, the latter TRIPs-Plus provisions do relate to plants and plant material protection but, they are not related to the claims covered in this research.

To review to what extent these provisions were new in Colombia, a second analysis was conducted. The second analysis elaborated on the regional and national regulations in place in Colombia. The analysis showed that plants and plant material are not made patentable by regional or national regulations. The regulations with relation to the enforcement of patents and other IPR are adapted to the requirements of the FTA, but also before the FTA enforcement regulations were strict already. The Penal Code of 2000 provides fines and imprisonment for patent infringement. And the Commercial Code of 1972 provides seizure of machinery and equipment as a preventive measure for patent infringement, as well as the FTA does many years later. Before the FTA was signed in 2006 the Penal Code was amended, which made fraudulent infringement of IPRs, including plant breeders' rights a crime punishable by a fine of 26.66 to 1,500 monthly wages and 8 years in prison. In 2013 the national Law 1648 was introduced on enforcement measures for IPRs, to comply with the FTA provisions<sup>92</sup>. The law adapted to the FTA provisions in relation to information request, destruction of infringing products or counterfeit products and compensation for damage. Nevertheless, it has to be kept in mind that regarding plants and plant material protection, enforcement provisions of the Penal Code and Law 1648 apply only to protected varieties under the plant breeders' rights because plants and plant materials are not patentable and therefore cannot be enforced by these regulations. Therefore the provisions of the Commercial Code of 1972 do not apply because it only provides measures on patent infringement.

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<sup>92</sup> Law 1648 (2013)

Colombia accede to the UPOV 1978 Convention for the protection of new plant varieties in 1996, but the country already had a stricter regulation in place for the protection of plant varieties. The law provides the same protection for new plant varieties compared to UPOV 1991 in relation to the scope, the rights granted to breeders and almost the same term of protection<sup>93</sup>. The enforcement of the plant breeders' rights is the task of the ICA. The ICA introduced a seed certification system (Resolution 970) in 2010 which prohibits the use of seeds of varieties which are not certified or protected by plant breeders' rights. The FTA did not include the requirement of a seed certification system. Even more striking is the national Resolution 2046, which limits the use of farm-saved seeds of protected varieties since 2003 and only permits farmers with a farm less or equal to 5 hectares to use farm-saved seeds, but selling is prohibited.

Based on the analysis of the legal text of the TRIPs Agreement, the FTA and the regional and national regulations, this research has demonstrated that the claims made by the documentary and by GRAIN are not well-grounded and fall short in the existence of regional and national regulations. This research provides, next to the TRIPs-Plus provisions of the FTA, the regional and national regulations. The national regulations already provide similar protection for plants breeders' rights as is required in the FTA. The same applies to enforcement provisions. In addition, the national law provides a seed certification system, which obliges farmers to use certified seeds for all commercial purposes, which goes beyond the requirements of the FTA. If the national regulations regarding plants and plant material protection in Colombia are influenced by the US world power in other ways than the FTA should be examined in further empirical research.

The introduction provide that in general many researchers and organisations are concerned about the negative effects the TRIPS-plus provisions in FTAs may have on farmers, agriculture and food security. This research is not empirical and does not come near the scope of this claim. An important finding of this research is however, the existence of equivalent national regulations in this field in Colombia, such as Resolution 2046 and Decision 345. Therefore, the impact of TRIPS-Plus provisions of FTA on impact on farmers, agriculture and food security, should not be analysed without taking national regulations into account. The national regulations should not be underestimated in the potential impact they have on farmers, agriculture and food security. Therefore with regard to the findings of this research, it can be concluded that in the national regulations needs to be considered as well to provide reliable legal data.

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<sup>93</sup> Decision 345 provides 20 to 25 years in the case of vines, forest trees and fruit trees, including their rootstocks, and from 15 to 20 years for other species and UPOV 1991 provides at least 25 years for vines, forest trees and fruit trees, including their rootstocks and at least 20 years for other varieties

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## **Laws and Regulations**

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CAN Decision 486

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## Case Law

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