

Protected food, drink or agricultural product name

# Single document for Café de Tolima

GB number: F0102

A protected geographical indication (PGI)

## 1. Product name(s)

Café de Tolima

## 2. Country

Colombia

## 3. Description of the agricultural product or foodstuff

### 3.1. Type of product [as in Annex XI implementing regulation 668/2014]

Clase 1.8.

### 3.2. Description of the producto

The coffee bean is the seed of a tropical shrub with green leaves, called coffee tree. Coffee belongs to the Rubiaceae family and to the Coffea genus. There are numerous species of coffee plants and different varieties of each species. The most commercially important species are known as Coffea Arabica Linnaeus (known as arabica coffee) and Coifea Canephora Pierre Ex Froehner (known as robusta coffee).

Taxonomic Description:

In the coffee zone of Tolima, as in the rest of the Colombian Coffee Zone described in the Colombian Coffee Denomination of Origin, the species Coffea arabica and the varieties that, duly evaluated by Cenicafé can constitute varieties subject to be catalogued as Colombian Coffee, are cultivated.

The exported or consumed CAFE DE TOLIMA product can be of only one of these varieties or of a mixture, depending on the varieties chosen in the production zones, but all of them come exclusively from the Coffea arabica species.

Among the main coffee varieties of the *Coffea arabica* species cultivated in the coffee growing zone of Tolima and reported in the SICA are mainly the varieties Caturra, Típica, Tabi, Colombia and Castillo. Tabi, Colombia and Castillo, including the regional version Castillo Pueblo Bello, which from the point of view of genetic origin have a high degree of similarity.

#### Chemical composition:

The nutrient and mineral contents in the soil of the coffee zone of Tolima are related to the minerals found in the coffee bean. The values and their high availability associated to the PH, give better growing conditions and balance of the nutrients for the growth of the bean.

Thus, potassium in the coffee bean represents approximately 40% of the mineral content of ground coffee. Phosphorus represents 4% of its mineral composition. The remaining mineral content is composed of approximately 30 different elements, including magnesium, calcium and sulfur.

Within the chemical composition of coffee around one thousand compounds have been identified, of which some have been identified as chemical precursors associated to some sensory attributes of the coffee beverage. Among the compounds that give coffee its quality are:

- Caffeine: This substance is partly responsible for the bitter taste of the coffee beverage.
- Trigonelline: Influences the bitter taste and this compound is known for its direct contribution to the formation of aromas during roasting.
- Lipids: Contribute to the transmission of flavours and odours and are carriers of aroma, related to coffees with good acidity.
- Sucrose: Gives sweetness to the beverage and plays an important role during the roasting process. It is presumed that high levels of reducing sugars (glucose, fructose and maltose) improve the quality of the coffee beverage: they are also related to greater acidity and better cup quality.
- Chlorogenic acids and some isomers: Their concentration varies according to the degree of maturation and the environment where the coffee is grown. They participate in the formation of the aroma and are attributed with a great part of the astringent characteristic of the beverage.

The fruity notes are related to the presence of long chain fatty acids, such as oleic and linoleic acids.

#### Modal sensory profile for the coffee zone of Tolima:

In accordance with a descriptive quantitative analysis, it can be concluded that the product is characterized as a cup coffee with acidity and medium – full body, clean, smooth, with balance and diverse flavours in the spectrum of sweet, combined with citric and fruity sensations.

### **3.3 Feed (for products of animal origin only) and raw materials (for processed products only)**

### **3.4. Specific steps in production that must take place in the identified geographical area**

Colombian legislation establishes the possibility that the link of the designated product is essential or exclusive with the geographical area, in this order of ideas in this particular case the link is essential, that is to say that not all the stages of production necessarily take place within the delimited geographical area. The following stages are those that must be carried out within that geographical area:

- Harvesting
- Pulping
- Sifting
- Removal of mucilage (fermentation)
- Coffee washing
- Drying
- Storage of the dried parchment coffee

In this sense, it should be noted that the stages that are not exclusively carried out in the defined geographical zone are the following:

- Threshing and classification
- Coffee processing

### **3.5. Specific rules concerning slicing, grating, packaging, etc. of the product the registered name refers to**

### **3.6. Specific rules concerning labelling of the product the registered name refers to**

Article 11 of the Regulations for the Use of the DO contains the following provisions regarding the labeling of the final product to be marketed:

"11.1. Green coffee destined for national consumption covered under the Denomination of Origin CAFÉ DE TOLIMA, must comply in its labeling with the following:

- a) Be identified according to the type of preparation of the product:

For excelso or supreme: it shall be identified with the inscription DO CAFÉ DE TOLIMA, CAFÉ DE TOLIMA, adding the origin COLOMBIA or CAFÉ DE TOLIMA - COLOMBIA followed by the expression excelso or supreme. Example: CAFÉ DE TOLIMA SUPREMO - COLOMBIA.

For consumption and pasillas: shall be identified only with the inscription DO CAFÉ DE TOLIMA, CAFÉ DE TOLIMA or CAFÉ DE TOLIMA - COLOMBIA.

In any case of marking, the product must include the word COLOMBIA or COLOMBIANO, highlighting the origin of the coffee.

b) In the case of bulk shipments, the coffee must bear the information indicated in paragraph a), in the attached documentation.

c) Additionally, it must be marked according to the regulations established by the competent national and international authorities regarding the technical and commercial information that the coffee bags must bear, such as the OIC lot number;

d) Marks, product descriptors and/or countermarks denoting a generic or specific origin must not evoke or imitate the origin or the DO CAFÉ DE TOLIMA."

## **4. Concise definition of the geographical area**

The delimited geographical area is made up of the municipalities of Alpujarra, Alvarado, Anzoategui, Armero - Guayabal, Ataco, Cajamarca, Casabianca, Chaparral, Coyaima, Cunday, Dolores, Falan, Fresno, Herveo, Ibagué, Icononzo, Lérída, Libano, Mariquita, Melgar, Murillo, Natagaima, Ortega, Palocabildo, Planadas, Prado, Purificación, Rioblanco, Roncesvalles, Rovira, San Antonio, San Luis, Santa Isabel, Suárez, Valle De San Juan, Venadillo, Villahermosa and Villarrica.

These municipalities are part of the Colombian department of Tolima and are located between 02°52'59 and 05°19'59 north latitude and 74°24'18 and 76°06'23 west longitude, all at an altitude between 1000 and 2000 meters above sea level.

## **5. Link with the geographical área**

The interaction of the plant with the climate and the soil causes different expressions in the characteristics of the plant, such as: growth rate, flowering pattern, sowing days and grain density. In the specific case, the physical and chemical characteristics of the soils are one of the differentiating elements of its attributes. In fact, a large proportion of the coffee growing zone of Tolima is located on soils derived from volcanic ashes, which are more evolved.

In this sense, the pleasant aromas and the clean cup are due to the fact that the characteristics of the zone lead to a homogeneous development and maturity of the coffee bean. The fruity notes are related to the presence of long chain fatty acids, such as oleic and linoleic acids.

The acidity and fruity flavor of Tolima coffee derives from the characteristics of the soils, the prevailing temperature of 20°C and 21°C and the presence of volatile compounds mainly from the oxidation of lipids and fatty acids that during roasting form acids, aldehydes and ketones. The amount of lipid substance after roasting helps to fix the majority of the volatile fraction, responsible for the fruity sensations.

Finally, as regards the link, the product presents several causal relationships with the delimited geographical area, in particular with respect to: climate elements and bioclimatic indicators and, especially, in relation to soil elements.

Likewise, volcanic soil contributes to a high acidity rate. The physical condition of the soils contrasts well with the variables of pH, phosphorus, and potassium content. The pH level (average value of 5.0), favors the uptake of nutrients, especially calcium (Ca), magnesium (Mg), phosphorus (P)".

The acidity and fruity flavor of TOLIMA COFFEE derives from the characteristics of the soils, the prevailing temperature and the presence of volatile compounds mainly from the oxidation of lipids and fatty acids that during roasting form acids, aldehydes and ketones. The amount of lipid substance after roasting helps to fix most of the volatile fraction responsible for the fruity sensations.

From what has been described it can be deduced that the coffee cultivated and produced in the delimited geographical zone presents special characteristics that are provided by the climatological and soil conditions in which it is produced, from which the causal link between the geographical zone and the quality of the CAFÉ DE TOLIMA is derived.