



Arabica Varieties

A global catalog of Arabica coffee varieties from around the world.

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For most recent version of the data in this catalog, please visit: varieties.worldcoffeeresearch.org

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About the Catalog

Information is power. There are dozens of widely cultivated Arabica and Robusta coffee varieties around the world, and each is unique in its performance and adaptation to local conditions. This catalog brings urgently needed information to coffee farmers to help them decide which coffee is best for their situation. Agronomic data—expected yield, nutrition requirements, optimal altitude, disease and pest resistance, etc—about the widespread array of existing cultivated Arabica and Robusta coffee varieties has never been available in an open-access format before.

Because the life of a coffee tree is 20–30 years, the decision producers make about which variety to plant will have consequences until the next generation. If a farmer makes a poor decision on variety, the cumulative loss can be huge. Most coffee farmers—who earn their livelihoods based on the decisions they make about what kind of coffee to plant—don't typically have access to transparent information about available varieties and how they differ. The lack of a comprehensive, up-to-date coffee catalog puts farmers at risk and perpetuates chronically low yields around the globe.

The purpose of the catalog is to lower the risk associated with coffee farming by providing direct information to farmers and other farm renovation or planting decision-makers to enable them to make an informed choice about what variety is best for their circumstances. Choosing the right type of coffee lowers the risk of disease and pest losses, has consequences for quality in the cup, and will be critical for coffee producers facing rapidly changing climates. Choosing the correct variety—one that meets the farmer's goals and needs—can significantly reduce losses due to diseases/pests, increase production volume, and/or increase quality.

Throughout the coffee-producing world, there is widespread need for replanting with young trees, trees resistant to major diseases and pests (including coffee berry disease, coffee leaf rust, antestia bug and stem borer), and with improved varieties capable of meeting the challenges of the climate crisis.

Using the catalog

This catalog aims to present information for coffee producers and anyone working with coffee plants about how different varieties can be expected to perform under ideal conditions.

Of course, coffee is not always grown under ideal conditions. Factors such as environment, altitude, soil nutrition, weather, the age of the tree, and farm management practices can significantly affect a coffee tree's yield, quality, and health.

Because of this, it is impossible to give absolute data about certain aspects of a variety's performance (for example, cup quality or yield). In those cases, we provide a common variety (Caturra in Central America, SL28 in Africa) as a reference in the description of relevant variables. If a farmer knows how Caturra or SL28 would perform on their farm, given their particular climate, soil, and farm practices, they should be able to measure the relative performance of other varieties against that knowledge.

The intention of this catalog is that those working with coffee should be able to make informed decisions about which variety will work best for their situation and needs.

A living document

This catalog of coffee varieties is a living document and will continue to grow as more regions of the world are covered and as new varieties are developed.



Genetic modification in coffee

All the varieties listed in this catalog have been created through traditional breeding approaches. To the knowledge of scientists at World Coffee Research, no commercially available coffee variety has been created through genetic engineering.

World Coffee Research and all parties receiving funding from WCR are prohibited from engaging in the development of genetically modified coffees.

What's included

This catalog covers varieties from the two species of coffee plants that are in wide cultivation globally—*C. arabica* (known as Arabica), and *C. canephora* (known as Robusta).

Arabica

Arabica is the dominant species in Central and South America and much of east Africa, and is considered to produce the highest cup quality. The Arabica species is made up of many varieties or cultivars—distinct types that are able to sexually reproduce with one another.

Robusta

Robusta is the second-most commonly grown coffee species; its commercial importance has grown steadily over the last century and it now accounts for approximately 40% of global production. The genetic diversity of robusta coffee is much larger than that of arabica, and it is only just beginning to be explored by breeders and the industry alike.

Varieties scope

The varieties in this catalog have been selected for inclusion because of their economic, historical, cultural, or genetic importance to the global cultivation of coffee. World Coffee Research consulted widely with national coffee institutions, breeders, researchers, and coffee companies from across the world to make these selections.

Because the catalog is meant to be a practical tool and guide for coffee producers, it does not aim to represent an exhaustive list of all coffee varieties in existence. The varieties included here have been selected or developed by farmers and breeders primarily over the last century, although the domestication of coffee began at least 500 years ago.

Definition of a variety

To be considered for inclusion in this catalog, varieties must meet the following standards (based on the definition of a variety as given by the International Union for the Protection of New Varieties of Plants (UPOV)):

- The variety is **distinct**. It is distinguishable from other varieties based on the above set of characteristics.
- The variety is **uniform**. It can be precisely described by a set of characteristics and all the plants of this type look the same.
- The variety is **stable**. The variety can be reproduced in such a manner that its characteristics are unchanged in the next generation.

Note: There is some exception to the above rule of thumb. Some coffees included in this catalog—T5175, T5296, Anacafe 14, and Pacamara—do not meet the above definition because they are neither uniform nor stable from one generation to the next. They are included here because they are commonly known to farmers and grown widely in their respective regions, but it's important to know they lack uniformity and stability and therefore do not meet the definition of variety laid out here.

Geographical scope

Arabica

The current version of the arabica catalog covers the most important coffee varieties in the 15 countries listed below. Many varieties in this catalog are also found in countries not listed below.

- Costa Rica
 - El Salvador
 - Guatemala
 - Honduras
 - Jamaica
 - Kenya
 - Malawi
 - Nicaragua
 - Panama
 - Perú
 - República Dominicana
 - Rwanda
-

- Uganda
- Zambia
- Zimbabwe

Robusta

The current version of the catalog covers important robusta varieties in the 8 countries listed below.

- Brazil
 - Mexico
 - Uganda
 - Indonesia
 - Vietnam
 - India
 - Thailand
 - Philippines
-

Partners and reviewers

A special thanks to the following individuals and institutions who provided expertise and information to guide the development of the full catalog.

Arabica catalog

The arabica catalog was developed in consultation with coffee experts from across Central America and Africa. It is the result of visits to 16 countries and interviews of nearly 180 people from some over 100 private and public bodies involved in national or regional coffee sectors in Central America, the Caribbean, and Africa.

- Costa Rica
Instituto del Café de Costa Rica (ICAFÉ)
- El Salvador
Fundación Salvadoreña para Investigaciones en Café (PROCAFÉ)
Consejo Salvadoreño de Café
- Guatemala
Asociación Nacional del Café (ANACAFÉ)
- Honduras
Instituto Hondureño del Café (IHCAFÉ)
- Jamaica
Jamaica Agricultural Commodities Regulatory Authority (JACRA)
- Kenya
Kenya Agricultural & Livestock Research Organization (KALRO)
- Malawi
Department of Agricultural Research Services (DARS)
- Nicaragua
Instituto Nicaragüense de Tecnología Agropecuaria (INTA)
- Panama
Ministerio de Desarrollo Agropecuario (MIDA)
- República Dominicana
Consejo Dominicano del Café (CODOCAFÉ)
- Perú
Junta Nacional de Café (JNC)
- Rwanda
Rwanda Agriculture Board (RAB)
- Uganda
National Coffee Research Institute (NaCORI)
- Zimbabwe
Coffee Research Institute

The following individuals provided expertise and information to guide the development of this catalog:

- Noël Arrieta, Instituto del Café (ICAFÉ), Costa Rica
 - Francisco Anzueto, World Coffee Research
 - Fabian Echeverria Beirute, Texas A&M University
 - Job Chemutai Alunga, National Coffee Research Institute (NaCORI), Uganda
 - Jane Cheserek, Kenya Agricultural & Livestock Research Organization (KALRO), Kenya
 - Nathan Kachiguma, Department of Agricultural Research Services (DARS), Malawi
 - Simon Martin Mvuyekure, Rwanda Agriculture and Livestock Development Board (RAB), Rwanda
 - Pardon Chidoko, Coffee Research Institute (CRI), Zimbabwe
 - Gusland McCook, Jamaica Agricultural Commodities Regulatory Authority (JACRA)
 - Dulce Obin, PROMECAFE
 - José Arnold Pineda, Instituto Hondureño del Café (IHCAFÉ), Honduras
 - Oscar Ramos, Fundación Salvadoreña para Investigaciones en Café (PROCAFÉ), El Salvador
-

- Carlos Mario Rodríguez, Starbucks
- Susana Schuller Petzold, Junta Nacional de Café (JNC), Peru
- Alfredo Zamarripa, RD2 Vision (formerly)

Robusta catalog

The robusta catalog was developed in consultation with coffee experts across the world in South America, Central America, North America, Europe, Africa, and Asia. The following individuals and institutions that provided expertise and information to guide the development of this catalog:

- Alexsandro Lara Teixeira, Brazilian Agricultural Research Corporation (EMBRAPA), Brazil
 - Alfredo Zamarripa, National Institute of Forestry, Agriculture and Livestock Research (INIFAP), Mexico
 - Camila Nader, Nestlé, France
 - Catherine Kiwuka, National Agricultural Research Organization (NARO), Uganda
 - DaPeng Zhang, United States Department of Agriculture (USDA), USA
 - Dinh Thi Tieu Oanh, Western Highlands Agriculture and Forestry Science Institute (WASI), Vietnam
 - Fabrizio Arigoni, Nestlé, France
 - Gava Ferrão, Capixaba Institute for Research, Technical Assistance and Rural Extension (INCAPER), Brazil
 - Gonzalo Contreras, Nestlé, Mexico
 - Hurtado Mario, MERCON Coffee Group, Nicaragua
 - Kurian Raphael, Tata Coffee, India
 - Mario Fernandez, Specialty Coffee Association, USA
 - Nayani Surya Prakash, Former Director of Research Coffee Board, India
 - Rafael Chan, Nestlé, France
 - Robert Adomati, UGACOF, Uganda
 - Sunalini Menon, CoffeeLab Ltd., India
 - Tracy May Adair, J.M. Smucker Co., USA
 - Trinh Duc Minh, Buonmathuot Coffee Association, Vietnam
 - Tyler Youngquist, Smucker's, USA
 - Ucu Sumirat, Indonesian Coffee and Cocoa Research Institute (ICCRI), Indonesia
 - Valerie Poncet, Institute of Research for Development (IRD), France
-

Coffee's movement around the globe

Coffea arabica is native of Ethiopia, where the major genetic diversity of the species is found. Historians believe that coffee seeds were first taken from the coffee forests of Southwestern Ethiopia to Yemen, where it was cultivated as a crop. From these early plants, farmers and breeders have selected and created dozens of widely cultivated Arabica coffee varieties, each unique in its performance and adaptation to local conditions.

Recent genetic tests have confirmed that the main seeds taken from Ethiopia to Yemen were related to the Bourbon and Typica varieties. From Yemen, descendants of Bourbon and Typica spread around the world, forming the basis of most modern arabica coffee cultivation.

The Typica lineage

By the late 1600s, coffee trees had left Yemen and were growing in India. These seeds gave rise to coffee plantations in the Mysore region known as Malabar at that time. Recent genetic fingerprinting results indicate that both Typica- and Bourbon-like varieties were included in this introduction from Yemen to India. The Typica branch likely separated from Bourbon when the Dutch sent seeds in 1696 and 1699 from Malabar coast of India to Batavia, today called Jakarta, the capital of Indonesia, located on the populous island of Java. The Dutch had attempted to introduce seeds from Yemen directly to Batavia in 1690, however, the resulting plants died in 1699 after an earthquake. In other words, the isolation of the Typica branch and its subsequent movement around the world likely originated when the seeds came to Indonesia from India, not directly from Yemen as is often told.

From this Typica group introduced in Indonesia, a single coffee plant was taken in 1706 from Java to Amsterdam and given a home in the botanical gardens. This single plant gave rise to the Typica variety (just one variety among many in the Typica genetic group) that colonized the Americas during the 18th century. In 1714, after the Utrecht peace treaty between the Netherlands and France was signed, the mayor of Amsterdam offered a coffee plant to King Louis XIV; it was planted in the greenhouse of the Jardin des Plantes and quickly produced seeds (Chevalier and Dagron, 1928).

From the Netherlands, plants were sent in 1719 on colonial trade routes to Dutch Guiana (now Suriname) and then on to Cayenne (French Guiana) in 1722, and from there to the northern part of Brazil in 1727. It reached southern Brazil between 1760 and 1770.

From Paris, plants were sent to Martinique in the West Indies in 1723. The English introduced the Typica variety from Martinique to Jamaica in 1730. It reached Santo Domingo in 1735. From Santo Domingo, seeds were sent to Cuba in 1748. Later on, Costa Rica (1779) and El Salvador (1840) received seeds from Cuba.

From Brazil, the Typica variety moved to Peru and Paraguay. In the late eighteenth century, cultivation spread to the Caribbean (Cuba, Puerto Rico, Santo Domingo), Mexico and Colombia, and from there across Central America (it was grown in El Salvador as early as 1740). Until the 1940s, the majority of coffee plantations in Central America were planted with Typica. Because this variety is both low yielding and highly susceptible to major coffee diseases, it has gradually been replaced across much of the Americas with Bourbon varieties, but is still widely planted in Peru, the Dominican Republic, and Jamaica.

The Bourbon lineage

Records show that the French attempted to introduce this coffee from Yemen to Bourbon Island (now La Réunion) three times, in 1708, 1715 and 1718 ; recent genetic studies have confirmed this. Only a small number of plants from the second introduction and some from the third introduction were successful. Until the mid-19th century, Bourbon coffee did not leave the island.

French missionaries known as Spiritans (from the Congregation of the Holy Ghost) played a major role in the dissemination of Bourbon in Africa. In 1841, the first mission was established in La Reunion. From there, a mission was established in Zanzibar in 1859. From Zanzibar, one mission was established in 1862 in Bagamoyo (coastal Tanzania, called Tanganyika at that time), another at St. Augustine (Kikuyu, Kenya), and another one in 1893 in Bura (Taita Hills, Kenya). In each of the missions, coffee seeds originating from La Réunion were planted.

The St. Augustine seedlings were used to plant large swaths of the Kenyan highlands, while the Bagamoyo seedlings were used to establish several plantations in the Kilimanjaro region on Tanzanian side. As soon as 1930, a Tanzanian research station at Lyamungo near Moshi began a formal coffee breeding program based on "mass selection" of outstanding mother trees found in the neighboring plantations planted with Bagamoyo seeds. (Mass selection is also called massal selection and means that a group of individuals are selected based on their superior performance, seed from these plants is bulked to form a new generation, and then the process is repeated). This research station is the ancestor of today's Tanzanian Coffee Research Institute (TaCRI) main research station.

The seedlings from Bura were brought to another French Mission in Saint Austin (near Nairobi) in 1899, and from there seeds were distributed to settlers willing to grow coffee. These introductions are the origin of what became known as "French Mission" coffee.

Recent DNA fingerprinting has shown that old Indian varieties known as Coorg and Kent are related to the Bourbon-descended varieties. This indicates that in 1670, the first seeds sent out of Yemen to India by Baba Budan likely included both the Bourbon and Typica groups (see also Typica below). This may mean the Typica branch separated from Bourbon when the Dutch brought seeds in 1696 and 1699 from India (not from Yemen, as is often told).

Bourbon was first introduced to the Americas in 1860 to southern Brazil, near Campinas. From there, it spread north into Central America.

Main types of Arabica coffee

Ethiopian Landrace

A landrace is a domesticated, locally adapted, traditional variety of a species of animal or plant that has developed over time, through adaptation to its natural and cultural environment of agriculture and pastoralism, and due to isolation from other populations of the species.

In coffee, most landrace varieties originate from the forests of Ethiopia, where *C. arabica* evolved, through a process of human-led domestication. They are generally associated with very high cup quality and lower yields.

Bourbon and Typica Group

A small number of coffee trees taken out of Yemen beginning in the late 17th century form the basis of most worldwide arabica coffee production today, what we now call the “Bourbon and Typica genetic groups” (so-called because of the names of the famous Bourbon and Typica varieties which are the progenitors of this group). From Yemen, seeds were taken to India and then from India to the Indonesian island of Java by the Dutch, which gave rise to the “Typica” lineage (also called Arabigo or Indio). Typica plants were taken to conservatories in Europe and then spread across the American continent along colonial trade routes during the 18th century. Seeds were also introduced from Yemen to the island of Bourbon, which gave rise to the “Bourbon” lineage. The first Bourbon plants reached the American continent through Brazil after 1850. Both Typica and Bourbon plants were introduced to Africa in the 19th century through various routes. For a detailed history of how varieties in the Bourbon and Typica genetic group came to dominate global coffee production, see History of Bourbon and Typica.

These varieties are associated with standard or high cup quality, but are susceptible to the major coffee diseases. Today, coffee production in Latin America is still based to a large extent on cultivars developed from Typica and Bourbon varieties, contributing to a significant genetic bottleneck for *C. arabica*. In Brazil, which accounts for 40% of world production, 97.55% of coffee cultivars are derived from Typica and Bourbon.

Introgressed (Catimor/Sarchimor)

Introgressed varieties are those that possess some genetic traits from another species — mainly, *C. canephora* (Robusta), but also sometimes *C. liberica*. (“Introgressed” means “brought over.”) In the 1920s, a *C. arabica* and a *C. canephora* plant on the island of East Timor sexually reproduced to create a new coffee now known as the Timor Hybrid. This Arabica variety contains Robusta genetic material that allowed the plant to resist coffee leaf rust. Coffee experts realized the value of this disease resistance and began using the Timor Hybrid in experiments to create new varieties that could resist leaf rust. They selected many different lines of Timor Hybrid, and then crossed them with other varieties, most commonly the high-yielding dwarf Arabica varieties Caturra and Villa Sarchi. These crosses (Timor Hybrid x Caturra, and Timor Hybrid x Villa Sarchi) led to the creation of the two main groups of introgressed Arabica varieties: Catimors and Sarchimors. It’s important to note that, contrary to common belief, neither Catimors nor Sarchimors are themselves distinct varieties. Instead, they are groups of many different distinct varieties with similar parentage. Other introgressed varieties, like Batián, were created from complex multiple crosses involving the Timor Hybrid; RAB C15 is the only introgressed Arabica variety in this catalog that was not created using the Timor Hybrid—it originates from a controlled cross made by Indian breeders between an Arabusta (a different *C. arabica* x *C. robusta* cross) and the Arabica Kent variety. Many introgressed varieties are covered in this catalog. These varieties have traditionally been associated with lower cup quality than others, but they have been essential for coffee farmers for whom coffee leaf rust and coffee berry disease are a major threat.

A NOTE ABOUT COFFEE LEAF RUST RESISTANCE

Coffee leaf rust is one of the most important threats to coffee production globally. Coffee rust is a disease caused by the fungus *Hemileia vastatrix* that causes defoliation and may result in severe crop losses.

The emergence in the late 20th century of introgressed arabica varieties that were resistant to coffee leaf rust provided key protection against crop loss for many coffee producers for nearly three decades. Starting in the early 21st century, coffee experts in Central America began to notice that some historically rust-resistant varieties were being infected by rust, notably, Lempira in Honduras and Costa Rica 95 in Costa Rica. Because most of the available introgressed varieties obtained their rust resistance via a shared parent (the Timor Hybrid), it is believed by most experts that most existing rust-resistant varieties will no longer be resistant in the near-to-medium term.

Data in the catalog about specific varieties rust resistance status is based on validated reports by scientific entities. Unfortunately, because the coffee sector is still in the very early phases of building a good global system for rust research, tracking rust outbreaks, and following the breakdown of resistance, it is not always easy to validate when a variety is being affected by rust. In addition, the impact of rust on a specific variety can be different in different geographies, and depending on the race of rust (something that is not easy to identify currently). The challenge is made greater because many farmers don’t know for certain what varieties they have; in such cases, reports of rust impacting a historically resistant variety have to be carefully checked to ensure that the plants being affected are indeed the supposed variety.

Even so, significant anecdotal evidence supports the conclusion that the breakdown of rust resistance is accelerating in many parts of the world, and World Coffee Research is working closely with research bodies in various countries to understand the impact.

World Coffee Research will update the resistance status of a variety in the following circumstances:

- The breeder of the variety has issued an official statement announcing the breakdown of resistance
- World Coffee Research has validated the appearance of rust on a historically resistant variety using DNA fingerprinting and consultation with the breeder (if there is one), and local experts.
- Confirmation of the breakdown of resistance in one country does not necessarily mean that resistance is broken in all countries. Consequently, information will be provided about where resistance breakdowns have been confirmed.

F1 Hybrid

Hybrids generally are offspring resulting from the crossing of two genetically distinct individuals. For the purposes of this catalog, “hybrids” refers to F1 hybrids, a new group of varieties created by crossing genetically distinct Arabica parents and using the first-generation offspring. Many of these relatively new varieties were created to combine the best characteristics of the two parents, including high cup quality, high yield, and disease resistance. F1 hybrids are notable because they tend to have significantly higher production than non-hybrids.

AN IMPORTANT NOTE ABOUT F1 HYBRIDS

Seeds taken from F1 hybrid plants will not have the same characteristics as the parent plants. This is called "segregation." It means that the child plant will not look or behave the same as the parent, with potential losses of yield, disease resistance, quality, or other agronomic performance traits. The variety should only be reproduced through clonal propagation. It is therefore important for farmers to know that F1 hybrids seedlings should be purchased from trusted nurseries.



Variables

STATURE

What is the growth habit of the plant (e.g., is the plant tall or compact)?

Dwarf, Tall, Unknown, Not applicable



LEAF TIP COLOR

What color are the tips of new leaves?

Green, Bronze, Green or Bronze, Light Bronze, Dark Bronze, Unknown, Not applicable



BEAN SIZE

How big are the coffee beans? For Arabica reference, Caturra = Average, SL28 = Large, and Maragogipe = Very Large.

Below Average, Average, Large, Very Large, Unknown, Not applicable



YIELD POTENTIAL

How much fruit will the coffee tree produce? For Arabica reference, Caturra = Good, and SL28 = Good

Low, Medium, Good, High, Very High, Unknown, Not applicable



QUALITY POTENTIAL AT HIGH ALTITUDE

What is the potential for quality of this variety when grown at higher altitudes?

Very Low, Low, Good, Very Good, Exceptional, Unknown, Not applicable



OPTIMAL ALTITUDE

What is the altitude at which quality and agronomic performance potential is maximized? This especially takes into account the variety's expected cup quality and tolerance to coffee leaf rust and coffee berry disease. Optimal altitude depends on a farm's latitude - farms located close to the equator will have higher optimal altitudes than those farther north or south of the equator.

First, locate your correct latitude, then find the corresponding optimal altitude.

Latitude 5°N to 5°S

Low: 1000-1200m
Low-medium: 1000-1600m
Medium: 1200-1600m
Medium-high: >1200m
High: >1600m
Low-Medium-High: >1000m

Latitude 5-15°N or 5-15°S

Low: 700-900m
Low-medium: 700-1300m
Medium: 900-1300m
Medium-high: >900m
High: >1300m
Low-Medium-High: >700m

Latitude >15°S or >15°N

Low: 400-700m
Low-medium: 400-1000m
Medium: 700-1000m
Medium-high: >700m
High: >1000m
Low-Medium-High: >400m



COFFEE LEAF RUST

Is the plant susceptible to leaf rust?

Coffee rust is a foliar disease of coffee caused by the fungus *Hemileia vastatrix* that causes defoliation and may result in severe crop losses. Plant diseases are constantly evolving. *Note: A variety that is resistant to a disease today may not be resistant tomorrow.*

Resistant, Tolerant, Susceptible, Unknown, Not applicable

NEMATODE

Is the plant susceptible to nematodes (specifically the species *Meloidogyne spp.* and/or *Pratylenchus spp.*)?

Nematodes are microscopic animals which infect the plant roots and can cause wilting and death of the plant.

Resistant, Tolerant, Susceptible, Unknown, Not applicable

COFFEE BERRY DISEASE

Is the plant susceptible to CBD?

CBD is a coffee disease that affects the fruit. It is caused by the fungus, *Colletotrichum kahawe*. Currently, CBD is not present in Central America, but it is a concern that the disease will spread. *Note: Plant diseases are constantly evolving. A variety that is resistant to a disease today may not be resistant tomorrow.*

Resistant, Tolerant, Susceptible, Unknown, Not applicable

YEAR OF FIRST PRODUCTION

When will the tree produce its first fruit?

Year 2, Year 3, Year 4, Unknown, Not applicable

NUTRITION REQUIREMENT

What level of nutrition (e.g., compost, fertilizer) does this plant require?

Very High, High, Medium, Low, Unknown, Not applicable

RIPENING OF FRUIT

At what time in the harvest season will the tree fruit ripen?

For Arabica reference, Caturra = Average. No Robusta reference.

Early, Average, Late, Very late, Unknown, Not applicable

CHERRY TO GREEN BEAN OUTTURN

What is the size of the bean in relation to the fruit? For Arabica reference, Caturra = Average, SL28 = High.

Low, Average, High, Very High, Unknown, Not applicable

PLANTING DENSITY

What spacing should you use for planting this variety? Note: In Central America, trees are typically pruned to have one main stem. In Africa, it is typical to prune trees for multiple (2-3) stems per tree. So, while tree planting densities typically are much lower in Africa, each tree is fruiting relatively more because there are multiple main stems.

1000-2000 per ha (using multiple-stem pruning)

2000-3000 per ha (using multiple-stem pruning)

3000-4000 per ha (using single-stem pruning)

5000-6000 per ha (using single-stem pruning)

4000-5000 per ha (using single-stem pruning)

Unknown

Not applicable

GENETIC DESCRIPTION

To which genetic group of Arabica does this variety belong?

Bourbon-Typica group (Typica related)

Bourbon-Typica group (Bourbon related)

Bourbon-Typica group (Typica and Bourbon related)

Ethiopian landrace

Introgressed (Catimor related)

Introgressed (Sarchimor related)

Introgressed (Other)

F1 hybrid (introgressed)

F1 hybrid (not introgressed)

Unknown

LINEAGE

What are the parents of this variety (when known) or what is its genetic lineage?

BREEDER

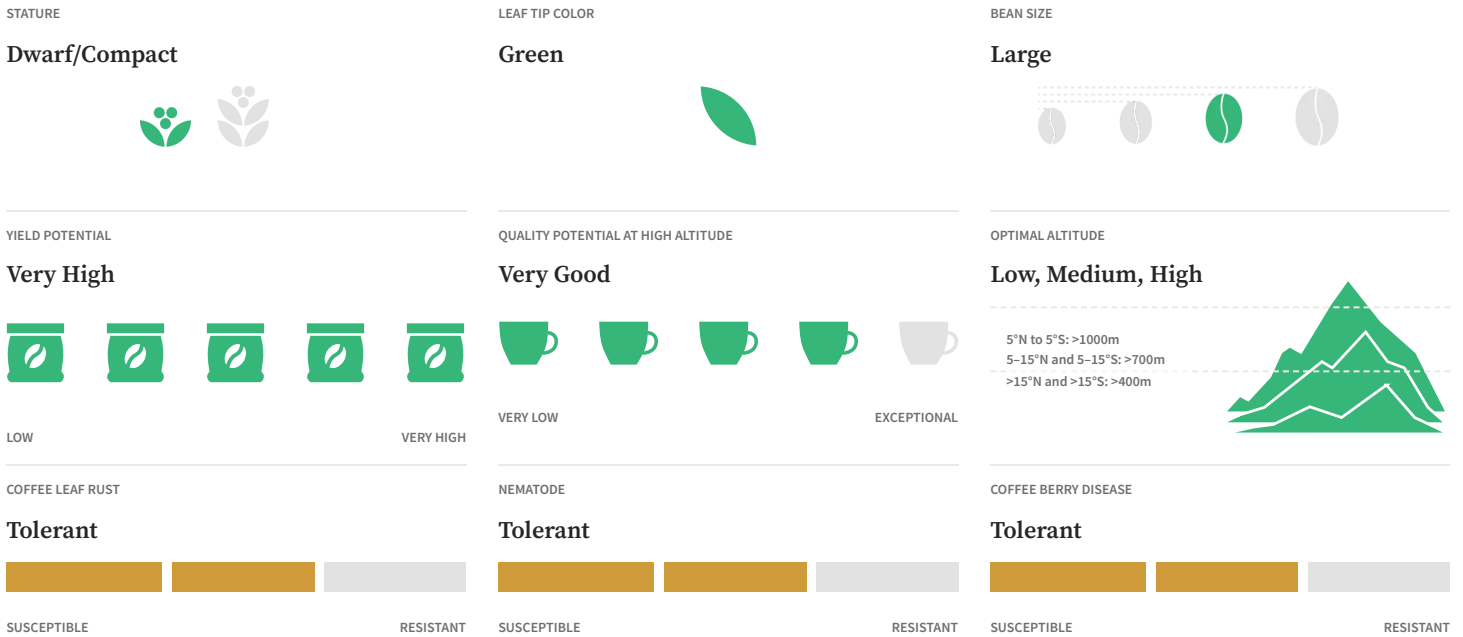
If the variety was created by a breeder, what is the name of the breeder?





Esperanza - L4 A5

Variety with very high productivity, tolerance to rust, and very good quality. Excellent adaptation to humid environments.



Agronomics

YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Very High
PLANTING DENSITY	3000-4000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Excellent adaptation to humid environments. An important note about F1 hybrids: Seeds taken from hybrid plants will not have the same characteristics as the parent plants. This is called "segregation." It means that the child plant will not look or behave the same as the parent, with potential losses of yield, disease resistance, quality, or other agronomic performance traits. The variety should only be reproduced through clonal propagation and purchased from trusted nurseries.

Background

GENETIC DESCRIPTION	F1 hybrid (introgressed)
LINEAGE	T5296 x Ethiopian Local Variety accession "ET25" (from the CATIE collection)
BREEDER	CIRAD-CATIE-ICAFF-ICAF-PROCAFE-ANACAFE



Caripe - Criollo Cogollo Verde

Very good cup quality with large beans. An important regional variety in Monagas state in northeastern Venezuela.

STATURE

Tall



LEAF TIP COLOR

Green



BEAN SIZE

Large



YIELD POTENTIAL

Medium



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good



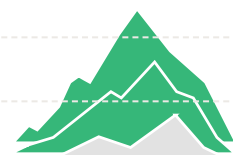
VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

Medium, High

5°N to 5°S: >1200m
5–15°N and 5–15°S: >900m
>15°N and >15°S: >700m



COFFEE LEAF RUST

Susceptible



SUSCEPTIBLE

RESISTANT

NEMATODE

Susceptible



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Susceptible



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	2000-3000 plants/ha (using multiple-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Highly adapted for commercial production in Monagas State in northeastern Venezuela.

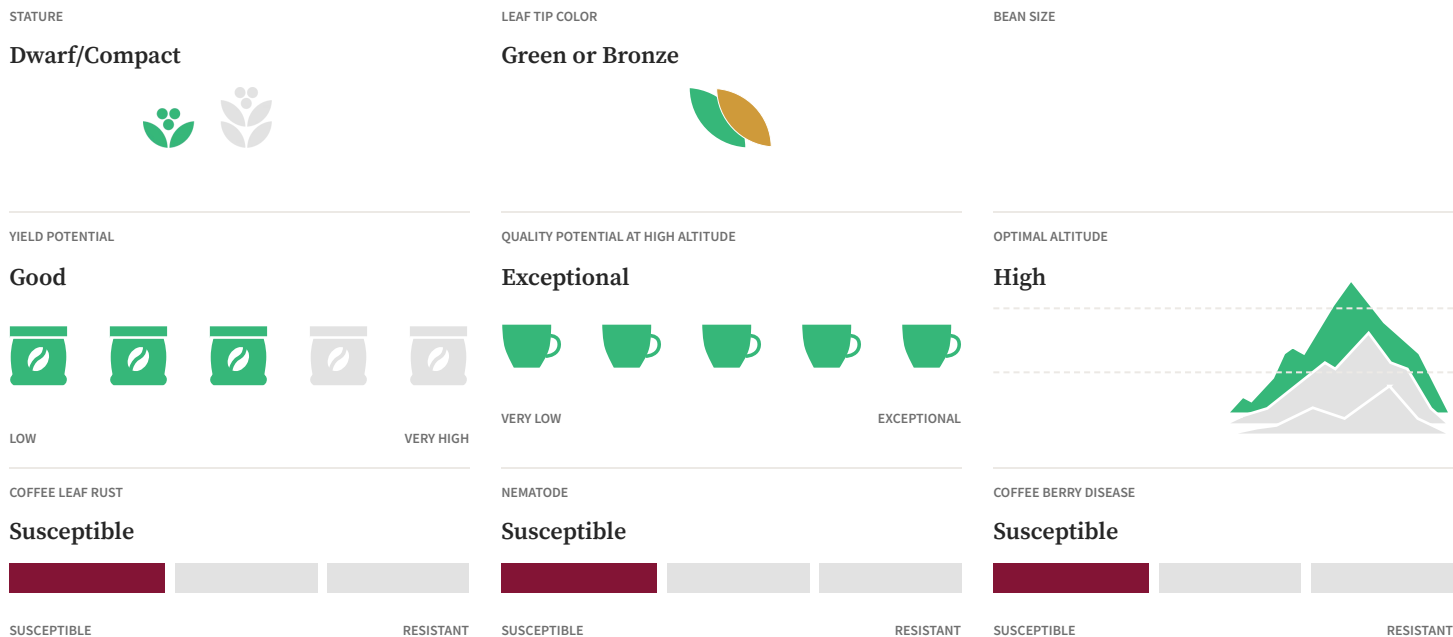
Background

GENETIC DESCRIPTION	Bourbon-Typica group (Typica related)
LINEAGE	A selection of the <u>Typica</u> variety.
BREEDER	Gustavo Buonafina Parra



Pacamara

Capable of producing exceptional cup quality. Very high susceptibility to coffee leaf rust. Variety not uniform; plants are not stable from one generation to the next.



Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	5000-6000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Pacamara is not homogeneous; plants are not stable from one generation to the next.

Background

GENETIC DESCRIPTION	Bourbon-Typica group (Typica and Bourbon related)
LINEAGE	Pacas x Maragogipe
BREEDER	Instituto Salvadoreño de Investigaciones del Café (ISIC)



Anacafe 14 - *Catimor*

Very high yielding variety, with rust resistance and good quality at elevations above 1300 meters. Variety not uniform.

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

YIELD POTENTIAL

High



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



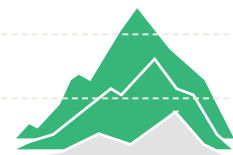
VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

Medium, High

5°N to 5°S: >1200m
5–15°N and 5–15°S: >900m
>15°N and >15°S: >700m



COFFEE LEAF RUST

Resistant



SUSCEPTIBLE

RESISTANT

NEMATODE

Susceptible



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Susceptible



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	High
PLANTING DENSITY	4000-5000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Anacafe 14 is drought tolerant. Anacafe 14 is not uniform; plants are not stable from one generation to the next.

Background

GENETIC DESCRIPTION	Introgressed (Catimor related)
LINEAGE	(Timor Hybrid 832/1 x Caturra) x Pacamara
BREEDER	National Coffee Association of Guatemala (ANACAFÉ)



Batian

A tall variety that combines high yields, tolerance to coffee leaf rust, resistance to coffee berry disease, and good cup quality.

STATURE

Tall



LEAF TIP COLOR

Green or Bronze



BEAN SIZE

YIELD POTENTIAL

High



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good

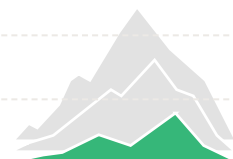


VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

Low



COFFEE LEAF RUST

Tolerant



SUSCEPTIBLE

RESISTANT

NEMATODE

Susceptible



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Resistant



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Unknown
CHERRY TO GREEN BEAN OUTTURN	High
PLANTING DENSITY	2000-3000 plants/ha (using multiple-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Well-adapted for smallholders because of its rare combination of being a tall variety with disease resistance and resilience (e.g., can cope with low management and adverse environmental conditions).

Background

GENETIC DESCRIPTION	Introgressed (Other)
LINEAGE	Composite variety containing parentage from: SL28, SL34, Rume Sudan, N39, K7, SL4 and the Timor Hybrid.
BREEDER	Coffee Research Foundation (now Kenya Agricultural and Livestock Research Organization, KALRO)

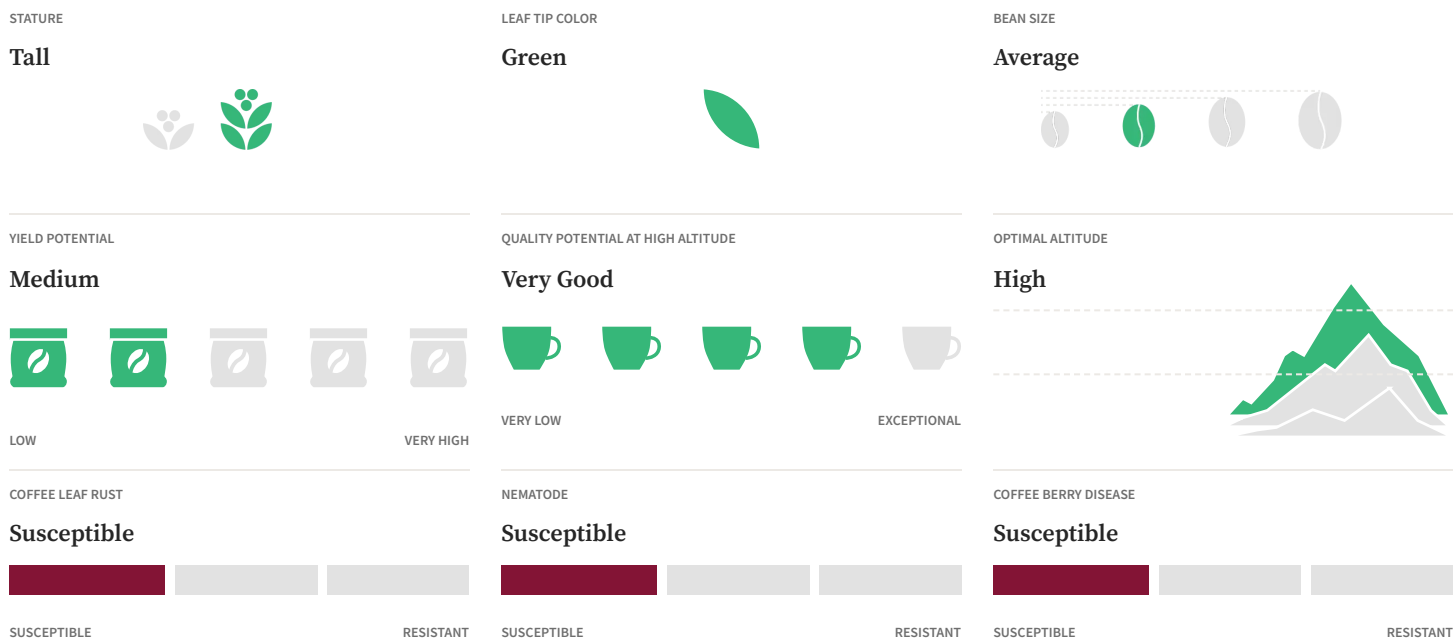


Bourbon

One of the most culturally and genetically important

C. arabica

varieties in the world, known for excellent quality in the cup at the highest altitudes.



Agronomics

YEAR OF FIRST PRODUCTION	Year 4
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Early
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	3000-4000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	

Background

GENETIC DESCRIPTION	Bourbon-Typica group (Bourbon related)
LINEAGE	Bourbon-like genetic background.
BREEDER	None



Bourbon Mayaguez 71 - BM71

Moderate yield, good cup potential, and susceptible to major diseases. Adapted for medium altitudes. Found commonly in Rwanda and Burundi.

STATURE

Tall



LEAF TIP COLOR

Bronze



BEAN SIZE

Large



YIELD POTENTIAL

Medium



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



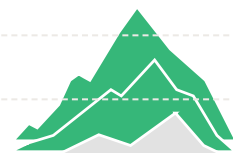
VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

Medium, High

5°N to 5°S: >1200m
5–15°N and 5–15°S: >900m
>15°N and >15°S: >700m



COFFEE LEAF RUST

Susceptible



SUSCEPTIBLE

RESISTANT

NEMATODE

Unknown

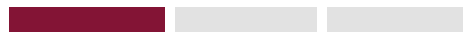


SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Susceptible



SUSCEPTIBLE

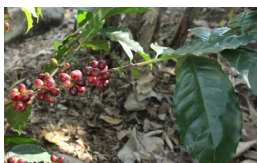
RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Unknown
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	

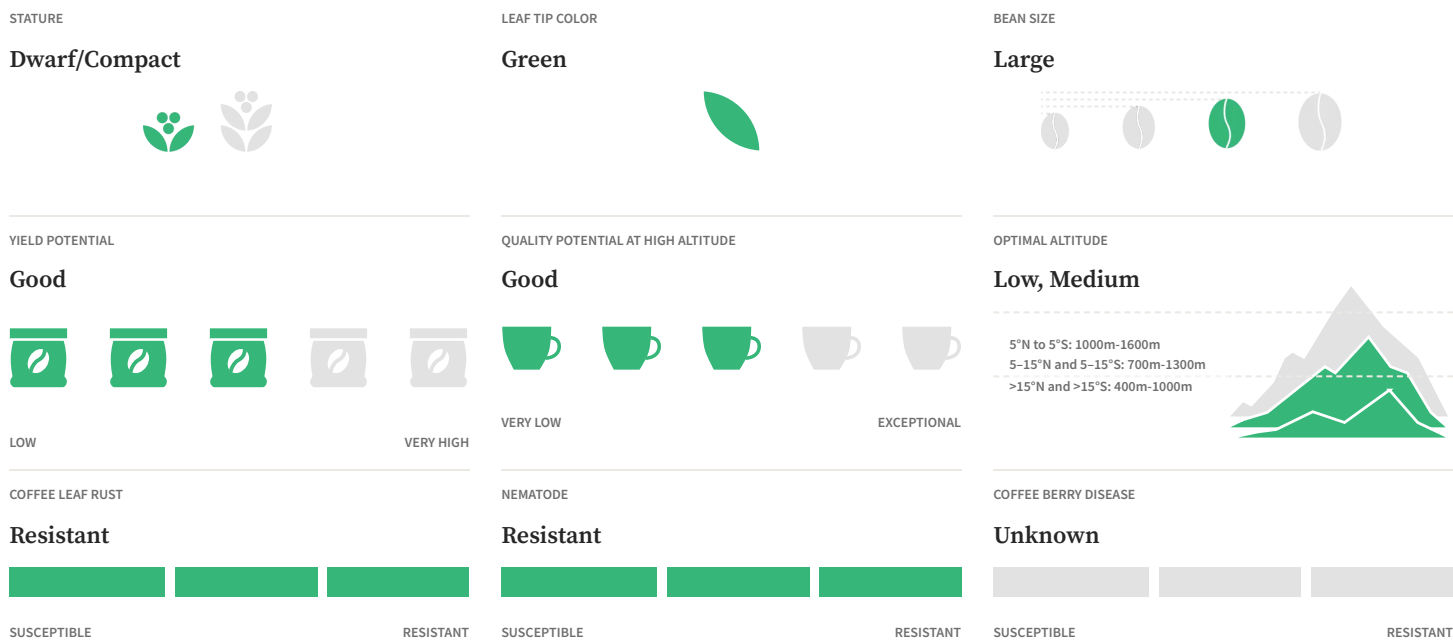
Background

GENETIC DESCRIPTION	Bourbon-Typica group (Bourbon related)
LINEAGE	Bourbon-like genetic background.
BREEDER	Rwanda Agricultural Board (RAB)



Cuscatleco - *Sarchimor*

Well-adapted to medium altitudes. Resistant to coffee leaf rust and some nematodes.



Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	High
PLANTING DENSITY	5000-6000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Nematode resistance: Not resistant to <i>Pratylenchus spp.</i> It is resistant to <i>Meloidogyne exigua</i> .

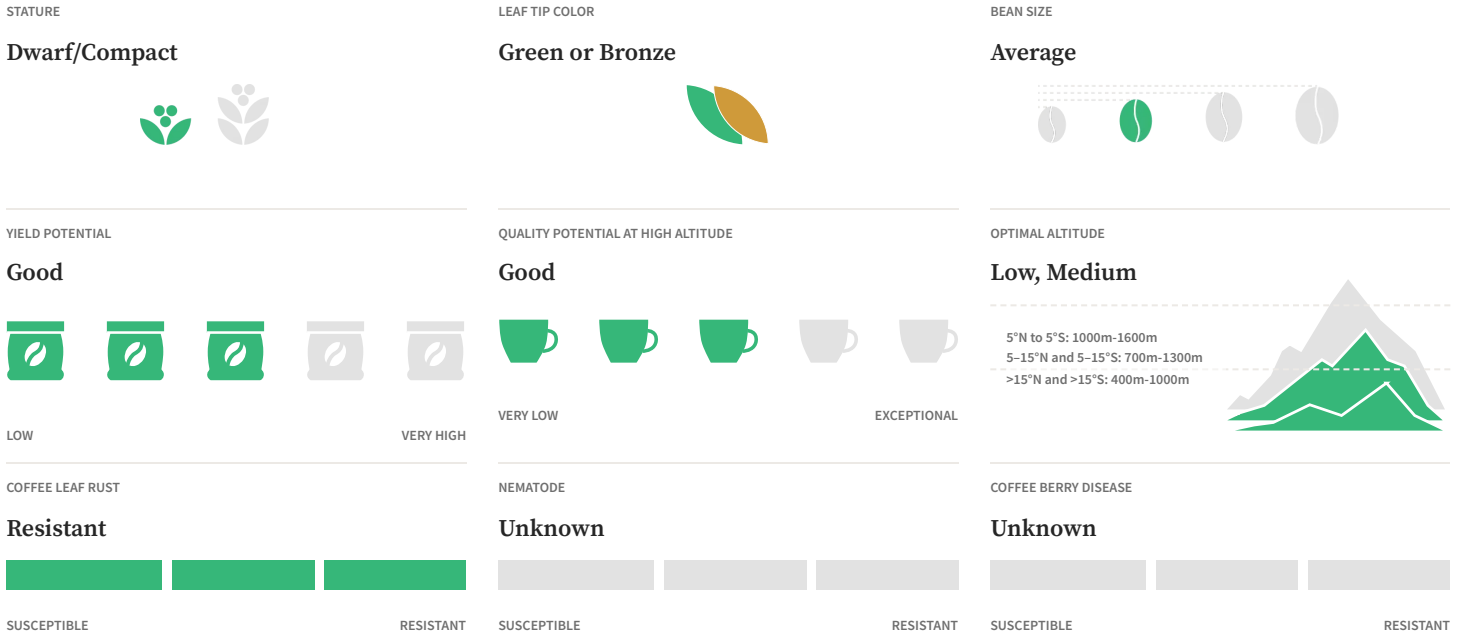
Background

GENETIC DESCRIPTION	Introgressed (Sarchimor related)
LINEAGE	Selection of T5296
BREEDER	Fundación Salvadoreña para Investigaciones del Café (PROCAFÉ)



Fronton - *Catimor*

Early production and high yielding plant resistant to coffee leaf rust. Well-adapted to low and medium altitudes. Found primarily in Puerto Rico.



Agronomics

YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	High
PLANTING DENSITY	3000-4000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Variety not homogenous; presents a non-specified amount of segregation in the field. Susceptible to coffee leaf miner.

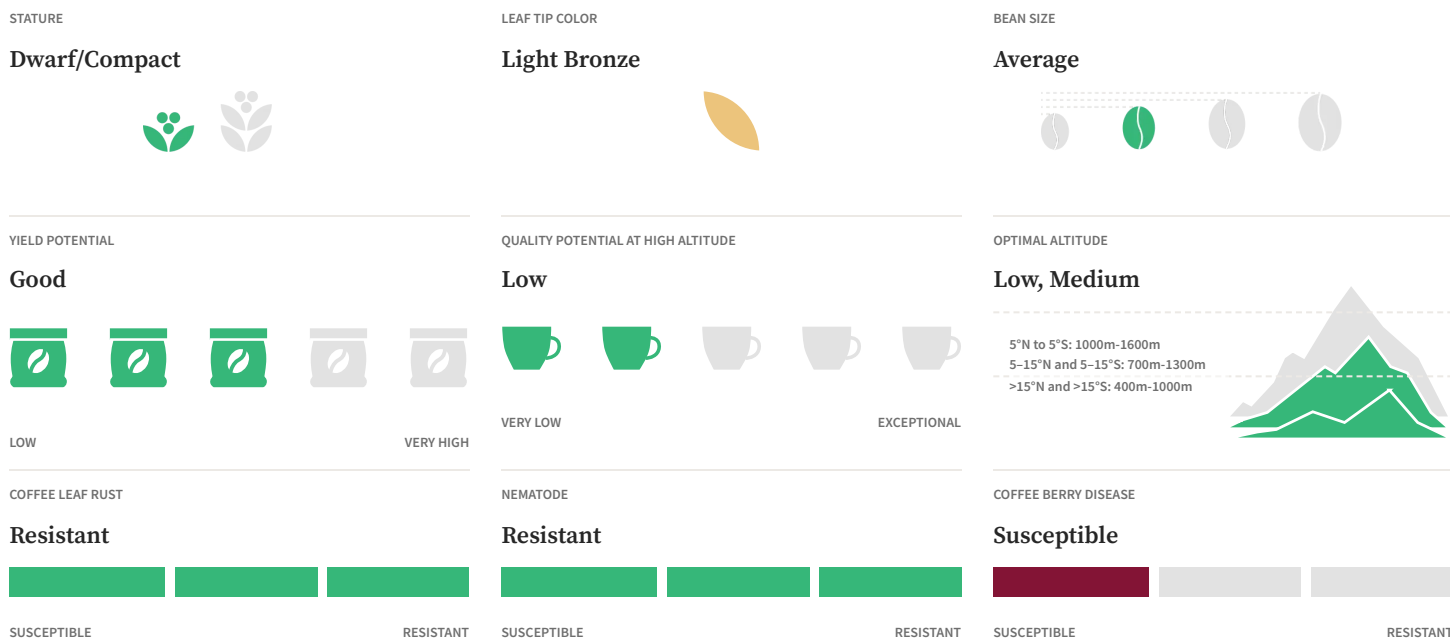
Background

GENETIC DESCRIPTION	Introgressed (Catimor related)
LINEAGE	Timor Hybrid x Caturra
BREEDER	None



IAPAR 59 - *Sarchimor*

High yielding plant adapted to medium altitudes. Resistant to coffee leaf rust and some nematodes.



Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	High
PLANTING DENSITY	5000-6000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Nematodes: Not resistant to <i>Pratylenchus spp.</i> It is resistant to <i>Meloidogyne exigua</i> .

Background

GENETIC DESCRIPTION	Introgressed (Sarchimor related)
LINEAGE	Timor Hybrid 832/2 x Villa Sarchi
BREEDER	Instituto Agronômico do Paraná (IAPAR), Brazil



Bourbon Mayaguez 139 - BM139

Vigorous and highly productive tall variety with very good cup quality. Found commonly in Rwanda and Burundi.

STATURE

Tall



LEAF TIP COLOR

Bronze



BEAN SIZE

Large



YIELD POTENTIAL

High



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good

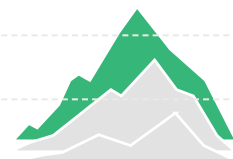


VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

High



COFFEE LEAF RUST

Susceptible



SUSCEPTIBLE

RESISTANT

NEMATODE

Unknown



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Susceptible



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	2000-3000 plants/ha (using multiple-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	

Background

GENETIC DESCRIPTION	Bourbon-Typica group (Bourbon related)
LINEAGE	Bourbon-like genetic background.
BREEDER	Rwanda Agricultural Board (RAB)



Casiopea

High yielding variety, with exceptional quality at elevations above 1300 meters.

STATURE

Dwarf/Compact



LEAF TIP COLOR

Bronze



BEAN SIZE

Large



YIELD POTENTIAL

High



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Exceptional

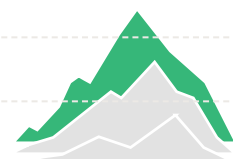


VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

High



COFFEE LEAF RUST

Susceptible



SUSCEPTIBLE

RESISTANT

NEMATODE

Susceptible



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Susceptible



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Very High
PLANTING DENSITY	4000-5000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	An important note about F1 hybrids: Seeds taken from hybrid plants will not have the same characteristics as the parent plants. This is called "segregation." It means that the child plant will not look or behave the same as the parent, with potential losses of yield, disease resistance, quality, or other agronomic performance traits. The variety should only be reproduced through clonal propagation and purchased from trusted nurseries.

Background

GENETIC DESCRIPTION	F1 hybrid (not introgressed)
LINEAGE	Caturra x Ethiopian wild accession "ET41" (CATIE collection)
BREEDER	CIRAD-CATIE-ICAFFE-IHCAFFE-PROCAFFE-ANACAFE



Catimor 129 - *Cat129, Nyika*

High yielding/Dwarf/Compact variety resistant to coffee leaf rust and coffee berry disease. Found commonly in Malawi, Zambia, and Zimbabwe.

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Large



YIELD POTENTIAL

Very High



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

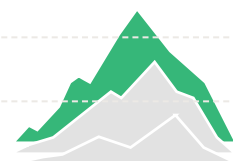


VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

High



COFFEE LEAF RUST

Resistant



SUSCEPTIBLE

RESISTANT

NEMATODE

Susceptible



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Resistant



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	3000-4000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Requires careful management to maximize yield without overbearing.

Background

GENETIC DESCRIPTION	Introgressed (Catimor related)
LINEAGE	Selection of a Catimor breeding line from Colombia (Caturra x Timor Hybrid 1343)
BREEDER	Cenicafe



Catisic - *Catimor*

Adapted to warmest zones and acidic soils. High yielding.

STATURE

Dwarf/Compact



LEAF TIP COLOR

Bronze



BEAN SIZE

Average



YIELD POTENTIAL

High



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Low



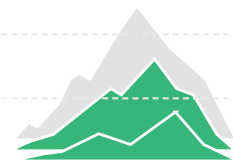
VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

Low, Medium

5°N to 5°S: 1000m-1600m
5-15°N and 5-15°S: 700m-1300m
>15°N and >15°S: 400m-1000m



COFFEE LEAF RUST

Resistant



SUSCEPTIBLE

RESISTANT

NEMATODE

Susceptible

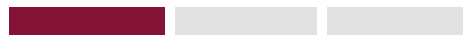


SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Susceptible



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Low
PLANTING DENSITY	5000-6000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Susceptible to Ojo de Gallo. Adapted to warmest zones and acidic soils.

Background

GENETIC DESCRIPTION	Introgressed (Catimor related)
LINEAGE	Timor Hybrid 832/1 x Caturra
BREEDER	Instituto Salvadoreño de Investigaciones del Café (ISIC)



Marsellesa - *Sarchimor*

High yielding plant adapted to medium altitudes. Notably high acidity in the cup.

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Average



YIELD POTENTIAL

High



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



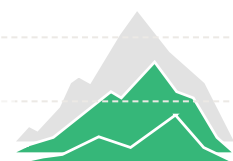
VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

Low, Medium

5°N to 5°S: 1000m-1600m
5-15°N and 5-15°S: 700m-1300m
>15°N and >15°S: 400m-1000m



COFFEE LEAF RUST

Resistant

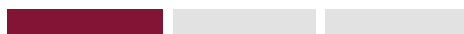


SUSCEPTIBLE

RESISTANT

NEMATODE

Susceptible



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Tolerant



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	High
PLANTING DENSITY	5000-6000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	

Background

GENETIC DESCRIPTION	Introgressed (Sarchimor related)
LINEAGE	Timor Hybrid 832/2 x Villa Sarchi CIFC 971/10
BREEDER	CIRAD-ECOM



Nemaya (*Coffea canephora*) - Rootstock

A Robusta variety used for rootstock grafting because of its high resistance to nematodes. Arabica plants (any variety) can be grafted onto Nemaya rootstock to make the plant resistant to nematodes.

STATURE

Not applicable

LEAF TIP COLOR

Not applicable

BEAN SIZE

Not applicable

YIELD POTENTIAL

Not applicable

QUALITY POTENTIAL AT HIGH ALTITUDE

Not applicable

OPTIMAL ALTITUDE

Not applicable

COFFEE LEAF RUST

Not applicable

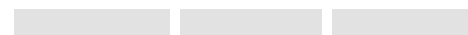
NEMATODE

Resistant

SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Unknown

SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Not applicable
NUTRITION REQUIREMENT	Not applicable
RIPENING OF FRUIT	Not applicable
CHERRY TO GREEN BEAN OUTTURN	Not applicable
ADDITIONAL AGRONOMIC INFORMATION	Grafting Arabica onto Robusta rootstock has no effect on cup quality. Propagation by seeds produced in authorized fields. Nematodes: Tolerant to <i>Pratylenchus spp.</i> and resistant to <i>Meloidogyne exigua</i> , <i>M. arenaria</i> , and <i>M. paranaensis</i> .

Background

LINEAGE	<i>C. canephora</i> T3561 x <i>C. canephora</i> T3751
BREEDER	PROMECAFE-CIRAD-CATIE



Obata (Red) - *Sarchimor*

A high yielding, rust-resistant Brazilian variety recently introduced to Costa Rica.

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Large



YIELD POTENTIAL

High



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



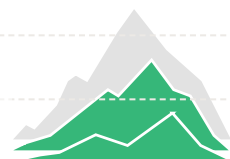
VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

Low, Medium

5°N to 5°S: 1000m-1600m
5-15°N and 5-15°S: 700m-1300m
>15°N and >15°S: 400m-1000m



COFFEE LEAF RUST

Resistant



SUSCEPTIBLE

RESISTANT

NEMATODE

Unknown



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Unknown



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	Unknown
PLANTING DENSITY	5000-6000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	

Background

GENETIC DESCRIPTION	Introgressed (Sarchimor related)
LINEAGE	Timor Hybrid 832/2 x Villa Sarchi CIFC 971/10
BREEDER	Instituto Agronômico (IAC), Brazil



Oro Azteca - *Catimor*

Adapted to warmest zones and acidic soils. High yielding.

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Average



YIELD POTENTIAL

High



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



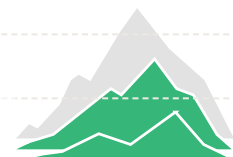
VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

Low, Medium

5°N to 5°S: 1000m-1600m
5-15°N and 5-15°S: 700m-1300m
>15°N and >15°S: 400m-1000m



COFFEE LEAF RUST

Resistant



SUSCEPTIBLE

RESISTANT

NEMATODE

Susceptible



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Susceptible



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	5000-6000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Susceptible to Ojo de Gallo. Recommended for acidic soils, soils rich in aluminum, and for warmest zones.

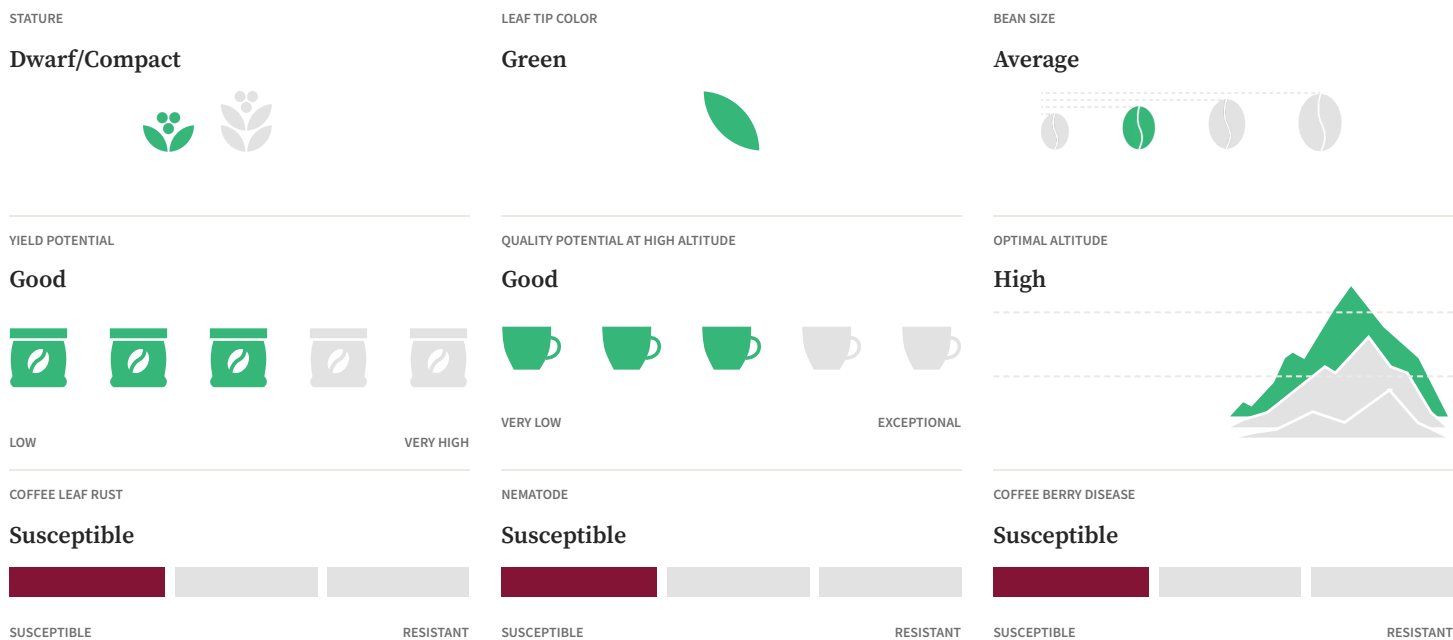
Background

GENETIC DESCRIPTION	Introgressed (Catimor related)
LINEAGE	Timor Hybrid 832/1 x Caturra
BREEDER	Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias (INIFAP), Mexico



Catuai

A compact plant with high yielding potential of standard quality in Central America. Very high susceptibility to coffee leaf rust.



Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	5000-6000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	

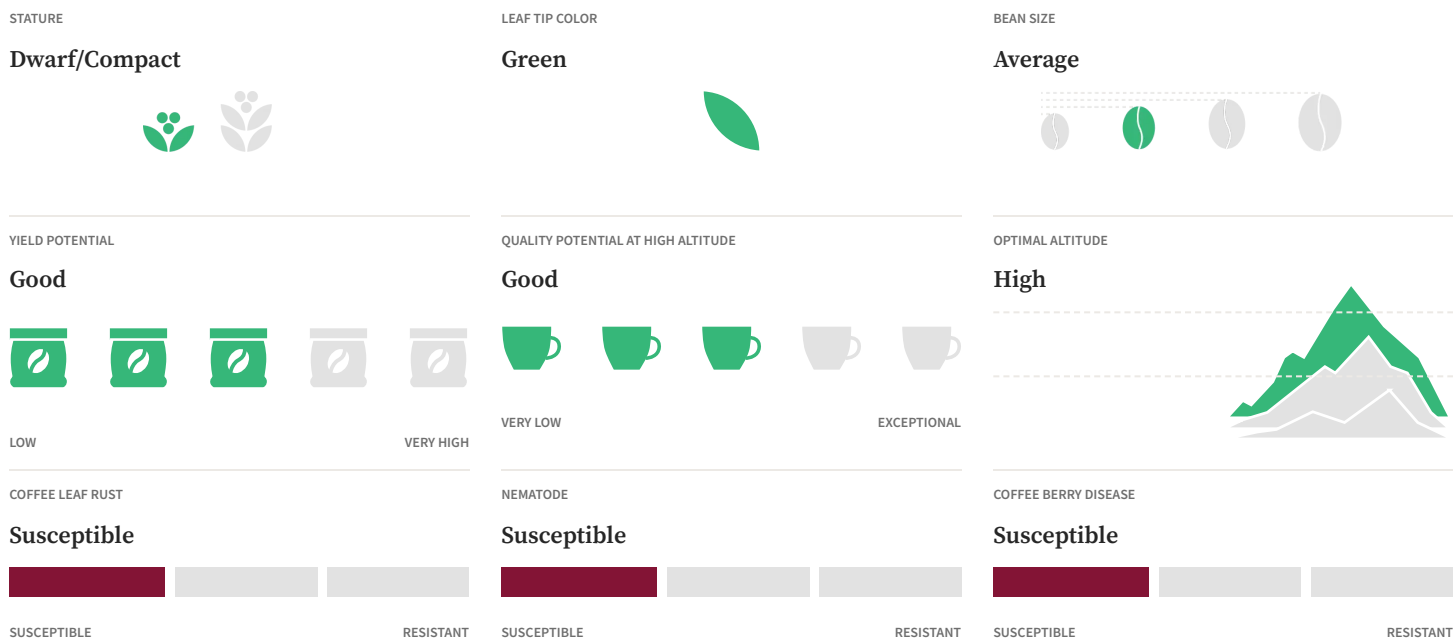
Background

GENETIC DESCRIPTION	Bourbon-Typica group (Typica and Bourbon related)
LINEAGE	Mundo Novo x Caturra
BREEDER	Instituto Agronômico (IAC), Brazil



Caturra

A compact plant with good yielding potential of standard quality in Central America. Very high susceptibility to coffee leaf rust.



Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	5000-6000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	

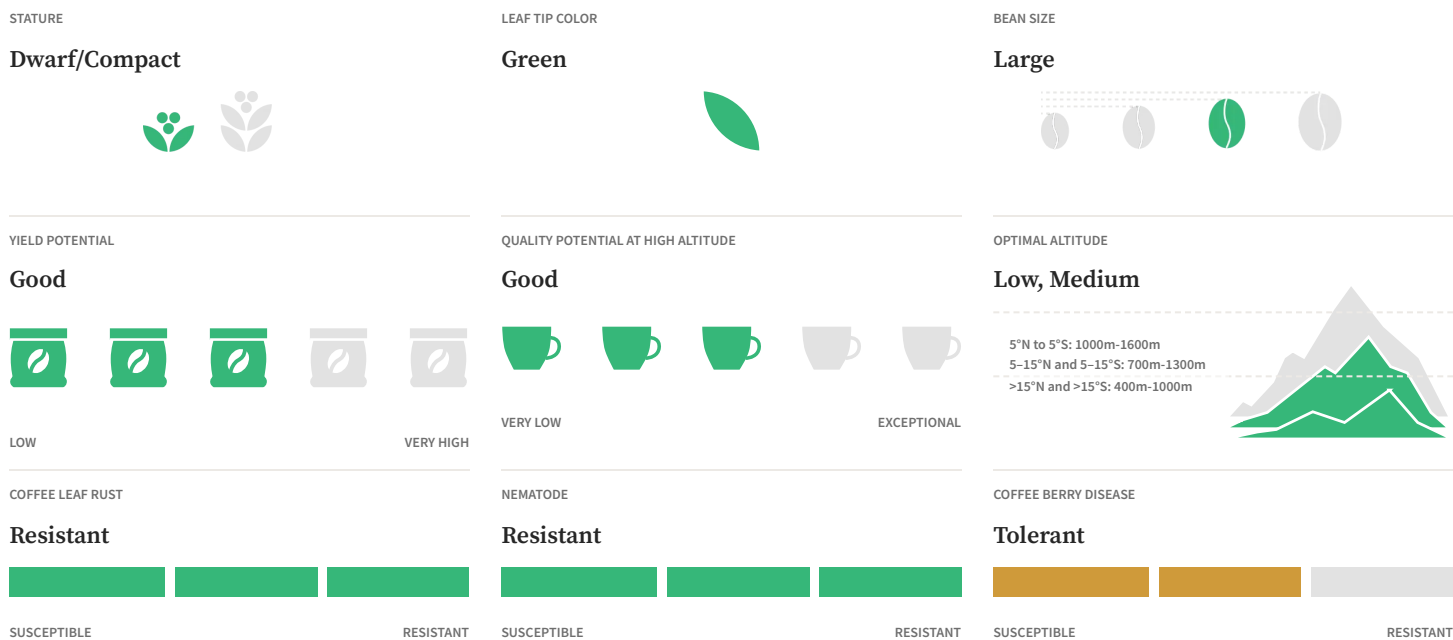
Background

GENETIC DESCRIPTION	Bourbon-Typica group (Bourbon related)
LINEAGE	Natural mutation of the Bourbon variety
BREEDER	Instituto Agronômico (IAC), Brazil



Parainema - *Sarchimor*

Well-adapted to medium altitudes, resistant to coffee leaf rust and some nematodes.



Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	High
PLANTING DENSITY	5000-6000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Nematodes: Not resistant to <i>Pratylenchus spp.</i> Is resistant to some <i>Meloidogyne spp.</i>

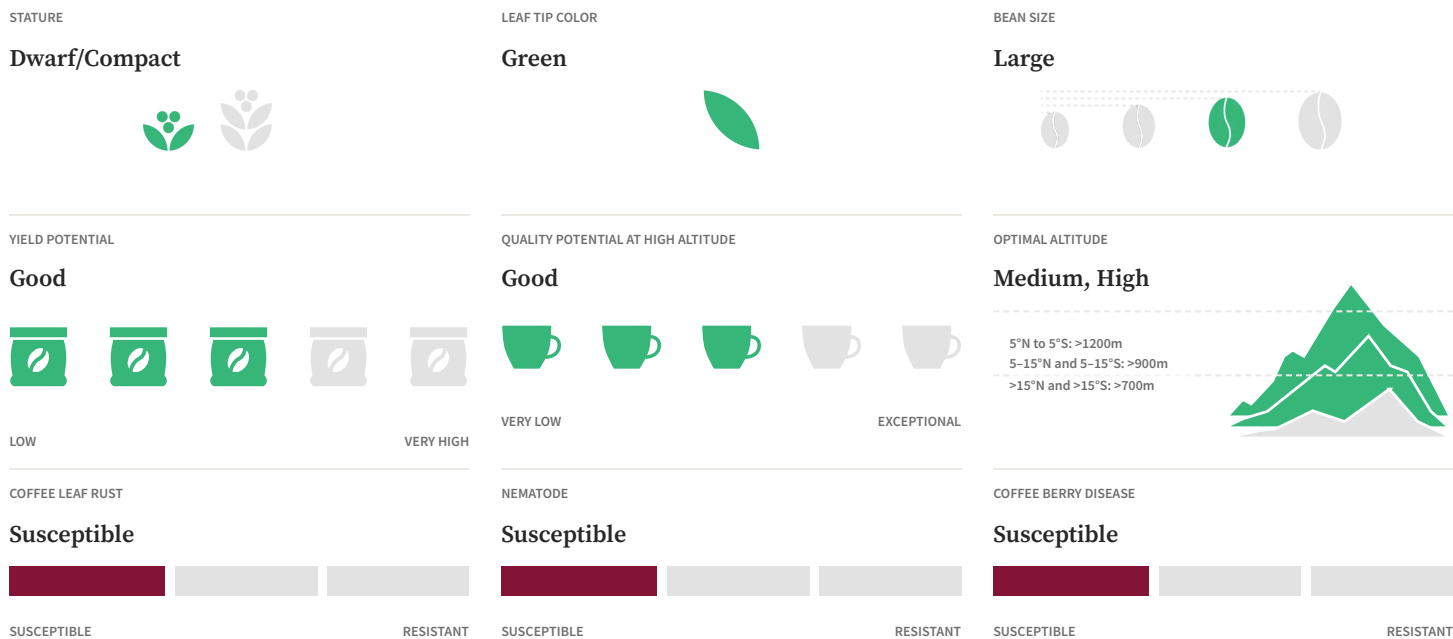
Background

GENETIC DESCRIPTION	Introgressed (Sarchimor related)
LINEAGE	Selection of T5296
BREEDER	Instituto Hondureño del Café (IHCAFE)



Venecia

Very high susceptibility to coffee leaf rust. Well-adapted to rainy zones due to late harvest during dry season.



Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	5000-6000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	-

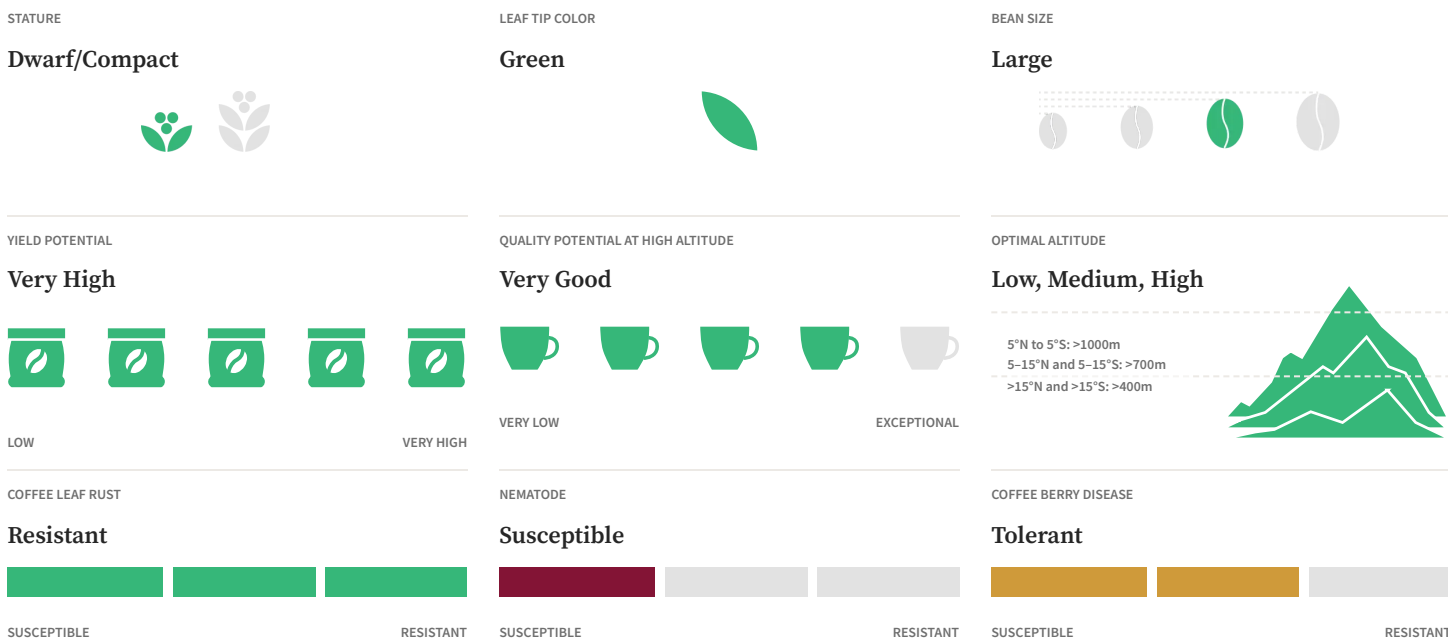
Background

GENETIC DESCRIPTION	Bourbon-Typica group (Bourbon related)
LINEAGE	A natural mutation of Bourbon
BREEDER	Instituto del Café de Costa Rica (ICAPE)



Centroamericano - H1

Very high yielding with very good quality potential if planted in healthy soil and at elevations >1300 meters, with resistance to rust. Well-adapted for agroforestry.

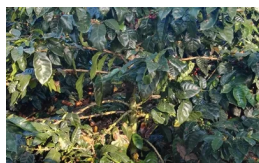


Agronomics

YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Very High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Very High
PLANTING DENSITY	3000-4000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	May have difficulty establishing roots in the first two years. Requires careful nutrition for roots to become established, avoiding too much nitrogen (N). An important note about F1 hybrids: Seeds taken from hybrid plants will not have the same characteristics as the parent plants. This is called "segregation." It means that the child plant will not look or behave the same as the parent, with potential losses of yield, disease resistance, quality, or other agronomic performance traits. The variety should only be reproduced through clonal propagation and purchased from trusted nurseries.

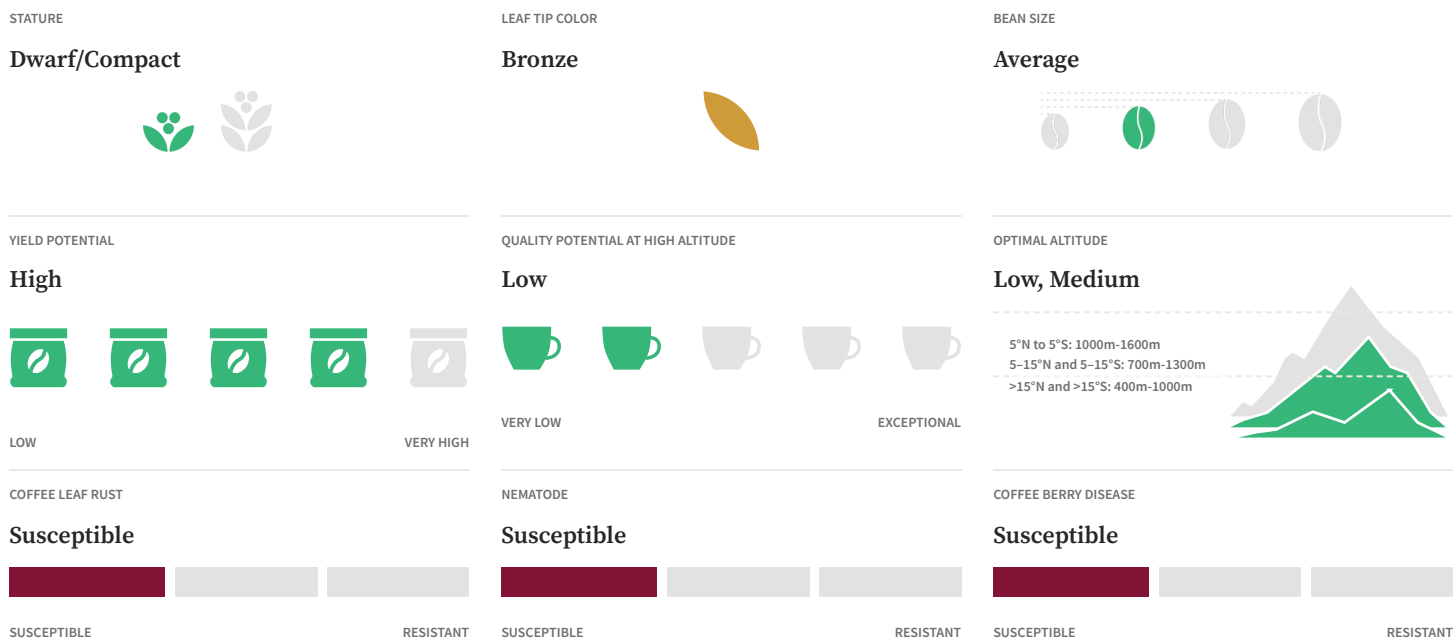
Background

GENETIC DESCRIPTION	F1 hybrid (introgressed)
LINEAGE	T5296 x Rume Sudan
BREEDER	CIRAD-CATIE-ICAFFE-IHCAFFE-PROCAFFE-ANACAFE



Costa Rica 95 - *Catimor*

High yielding variety adapted to warmest zones and acidic soils.



Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	5000-6000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Recently, Costa Rica 95 has been confirmed through scientific evaluation to be susceptible to coffee leaf rust in Costa Rica and may also be susceptible in other areas of Central America. Susceptible to Ojo de Gallo. Recommended for acidic soils and soils rich in aluminum. Recommended for warmest zones.

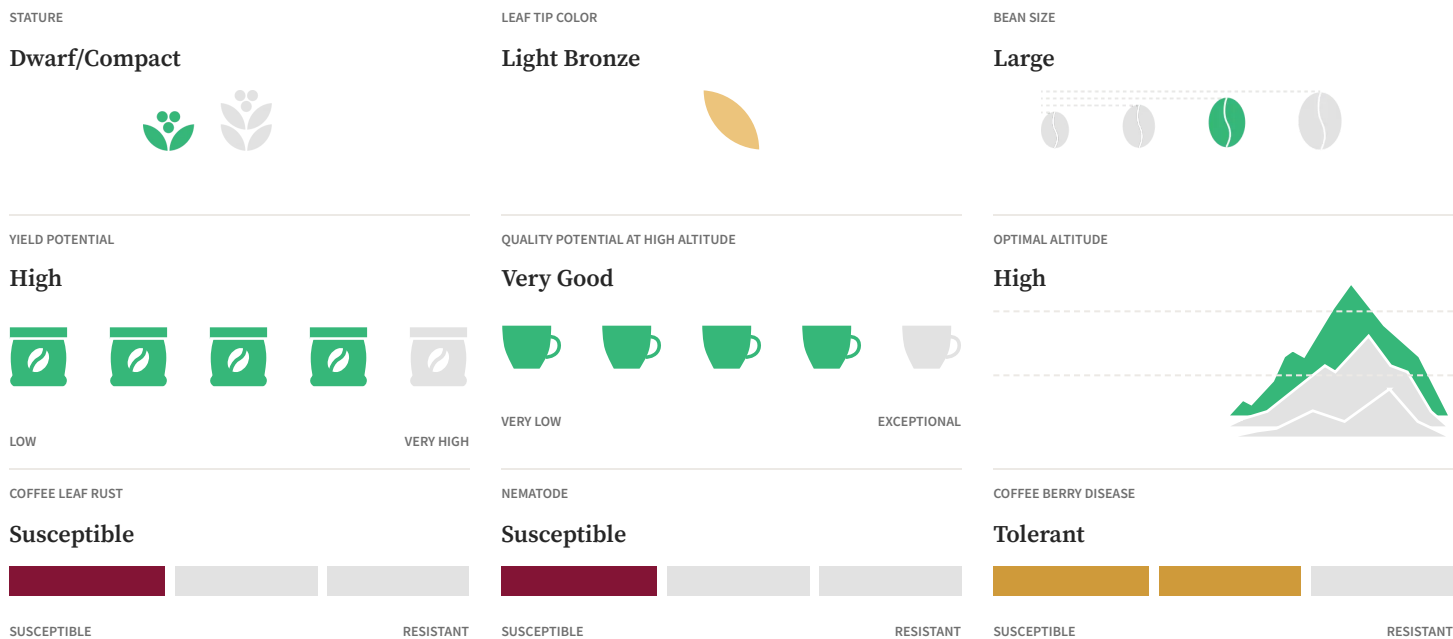
Background

GENETIC DESCRIPTION	Introgressed (Catimor related)
LINEAGE	Timor Hybrid 832/1 x Caturra
BREEDER	Instituto del Café de Costa Rica (ICAFFE)



Evaluna - EC18

Very high yielding variety at elevations at high altitudes.



Agronomics

YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Very High
PLANTING DENSITY	4000-5000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	<p>May have difficulty establishing roots in the first two years due to an imbalance between root growth and aerial parts. Requires careful nutrition for the roots to become properly established; avoid excess of nitrogen. An important note about F1 hybrids: Seeds taken from hybrid plants will not have the same characteristics as the parent plants. This is called "segregation." It means that the child plant will not look or behave the same as the parent, with potential losses of yield, disease resistance, quality, or other agronomic performance traits. The variety should only be reproduced through clonal propagation and purchased from trusted nurseries.</p>

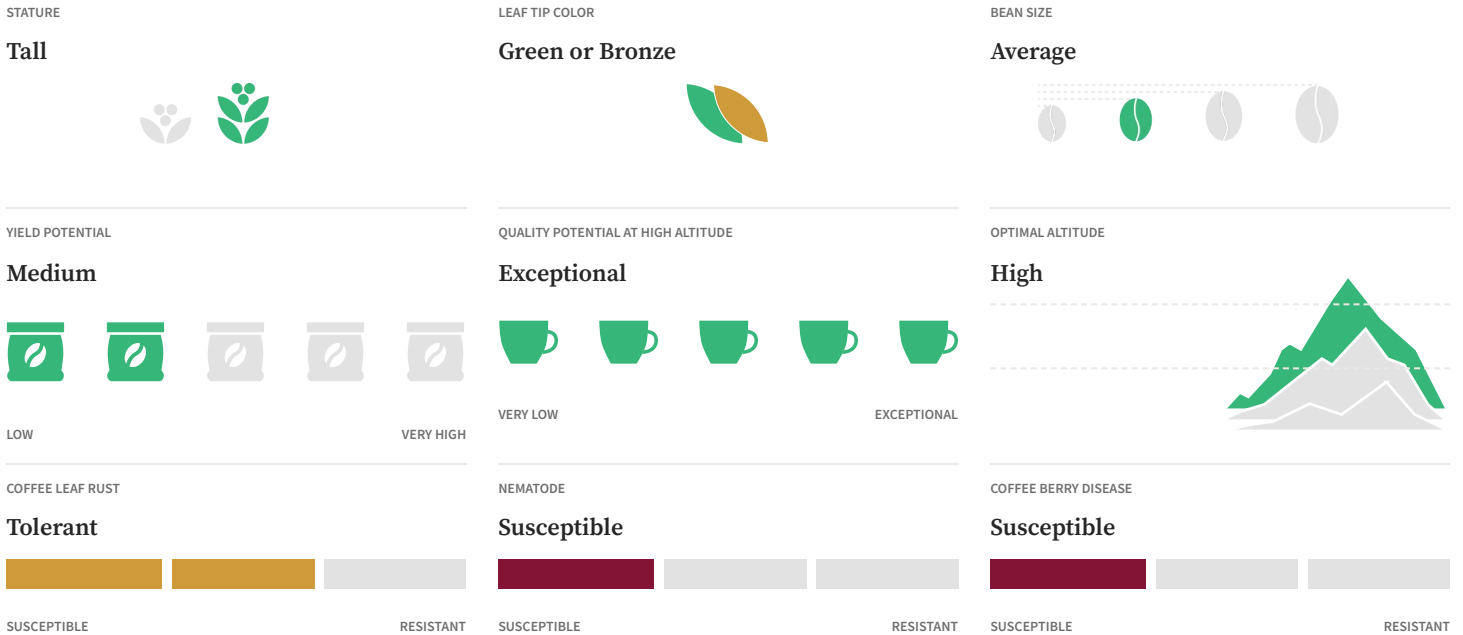
Background

GENETIC DESCRIPTION	F1 hybrid (introgressed)
LINEAGE	Naryelis (Catimor) x Ethiopian landrace accession "ET06" (CATIE collection)
BREEDER	CIRAD-ECOM



Geisha (Panama) - *Gesha*

Panamanian Geisha has exceptionally high quality at high altitudes. The term "Geisha" is often applied to other coffees that do not share the distinct genetics of Panamanian Geisha. Geisha is also cultivated widely in Malawi.

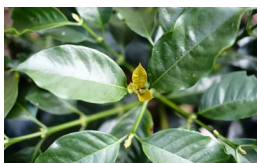


Agronomics

YEAR OF FIRST PRODUCTION	Year 4
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	3000-4000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	

Background

GENETIC DESCRIPTION	Ethiopian landrace
LINEAGE	Ethiopian landrace
BREEDER	None



H3

High yielding variety, with very good quality at elevations above 1300 meters.

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Large



YIELD POTENTIAL

High



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good

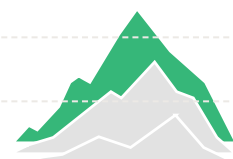


VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

High



COFFEE LEAF RUST

Susceptible

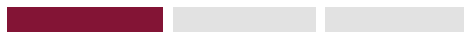


SUSCEPTIBLE

RESISTANT

NEMATODE

Susceptible



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Susceptible



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Very High
PLANTING DENSITY	3000-4000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Stature is intermediate between Dwarf/Compact and tall. An important note about F1 hybrids: Seeds taken from hybrid plants will not have the same characteristics as the parent plants. This is called "segregation." It means that the child plant will not look or behave the same as the parent, with potential losses of yield, disease resistance, quality, or other agronomic performance traits. The variety should only be reproduced through clonal propagation and purchased from trusted nurseries.






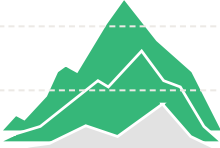



Background

GENETIC DESCRIPTION	F1 hybrid (not introgressed)
LINEAGE	Caturra x Ethiopian landrace accession "E531" (CATIE collection)
BREEDER	CIRAD-CATIE-ICAPE-IHCAFE-PROCAFE-ANACAFE



Harar Rwanda - Harar or Harraghe

High yielding with very good cup quality potential, but susceptible to the major diseases and prone to die back. This is the Harar variety sometimes found in Rwanda (no longer recommended by Rwandan coffee authorities because of its short productive life)

STATURE Tall 	LEAF TIP COLOR Dark Bronze 	BEAN SIZE Average 
YIELD POTENTIAL High 	QUALITY POTENTIAL AT HIGH ALTITUDE Very Good 	OPTIMAL ALTITUDE Medium, High <p>5°N to 5°S: >1200m 5–15°N and 5–15°S: >900m >15°N and >15°S: >700m</p> 
COFFEE LEAF RUST Susceptible 	NEMATODE Unknown 	COFFEE BERRY DISEASE Susceptible 
SUSCEPTIBLE RESISTANT	SUSCEPTIBLE RESISTANT	SUSCEPTIBLE RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	2000-3000 plants/ha (using multiple-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Many varieties or populations share the name Harar, but are not necessarily the same. This is the Harar variety sometimes found in Rwanda. It is no longer recommended by the Rwandan coffee authorities because of its short productive life.

Background

GENETIC DESCRIPTION	Bourbon-Typica group (Typica related)
LINEAGE	Typica-like genetic background, introduced to Rwanda in 1956.
BREEDER	Rwanda Agricultural Board (RAB)



IHCAFE 90 - *Catimor*

High yielding plant adapted to lowest altitudes. Requires high fertilization.

STATURE

Dwarf/Compact



LEAF TIP COLOR

Dark Bronze



BEAN SIZE

Average



YIELD POTENTIAL

High



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Low



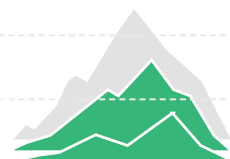
VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

Low, Medium

5°N to 5°S: 1000m-1600m
5-15°N and 5-15°S: 700m-1300m
>15°N and >15°S: 400m-1000m



COFFEE LEAF RUST

Susceptible



SUSCEPTIBLE

RESISTANT

NEMATODE

Susceptible



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Susceptible



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Very High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Low
PLANTING DENSITY	4000-5000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Recently, IHCAFE 90 has been confirmed through scientific evaluation to be susceptible to coffee leaf rust in Honduras and maybe possibly also be susceptible in other areas of Central America. Highly susceptible to Ojo de Gallo.

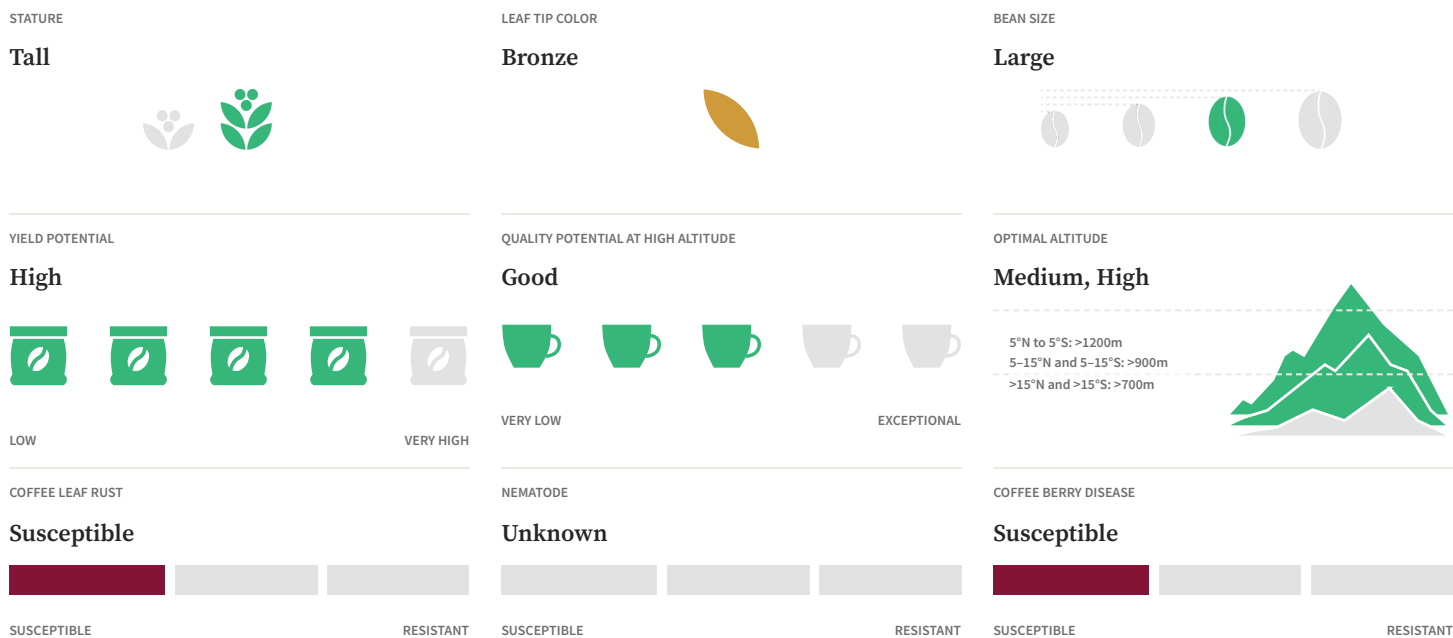
Background

GENETIC DESCRIPTION	Introgressed (Catimor related)
LINEAGE	Timor Hybrid 832/1 x Caturra
BREEDER	Instituto Hondureño del Café (IHCAFE)



Jackson 2/1257 - Jackson

Very vigorous and highly productive. Found commonly in Rwanda and Burundi.

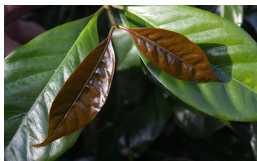


Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Unknown
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	

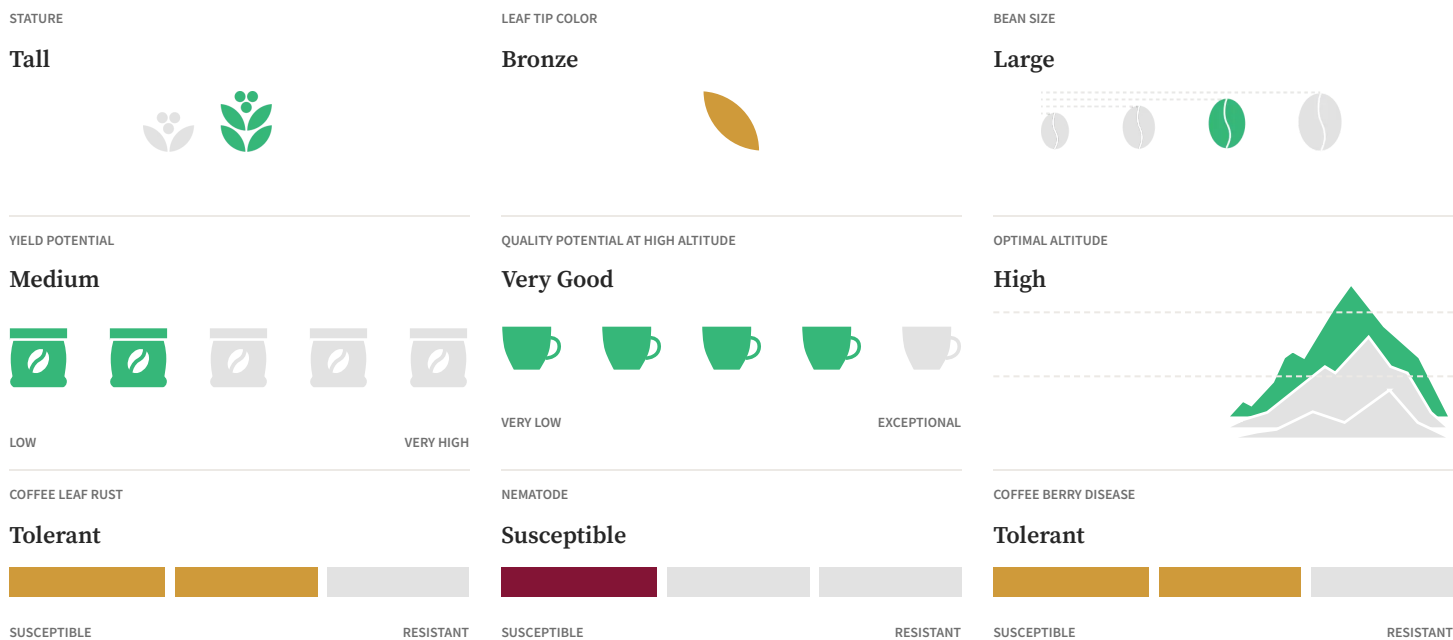
Background

GENETIC DESCRIPTION	Bourbon-Typica group (Bourbon related)
LINEAGE	A selection of Jackson. Bourbon-like genetic background.
BREEDER	Rwanda Agricultural Board (RAB)



Java

High quality in Central America. Tolerant to major diseases, with low fertilizer requirement. Good choice for smallholder farmers.



Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	Low
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	3000-4000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	

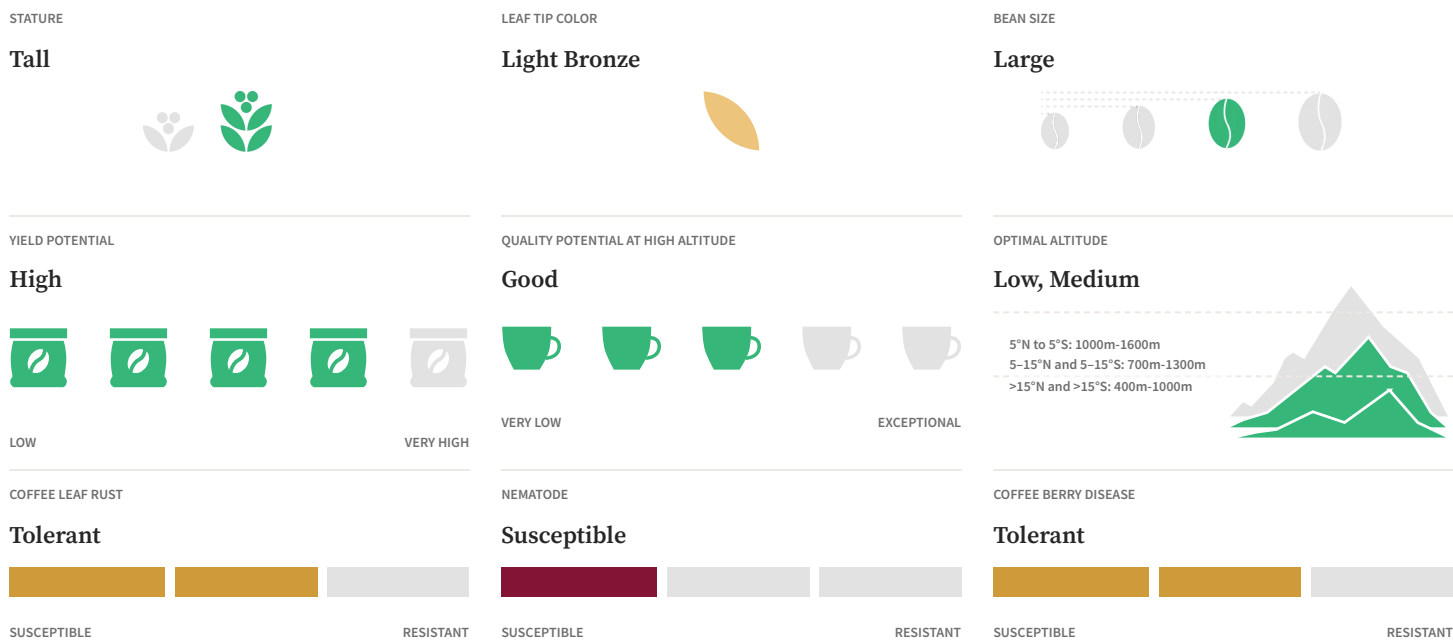
Background

GENETIC DESCRIPTION	Ethiopian landrace
LINEAGE	Ethiopian landrace
BREEDER	None



K7

Tolerant to coffee leaf rust and coffee berry disease. Found primarily in Kenya and Tanzania.



Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Unknown
CHERRY TO GREEN BEAN OUTTURN	High
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	K7 is distinguished by its spreading habit on young laterals although older primaries tend to droop. It has characteristic medium to narrow leaves with young shoot-tips that are light bronze in color. It is suited for lower altitudes where coffee leaf rust is prevalent.

Background

GENETIC DESCRIPTION	Bourbon-Typica group (Bourbon related)
LINEAGE	Selected from French Mission. Bourbon-like genetic background.
BREEDER	Individual farmer selection: R.H. Walker in Kenya in 1936



KP423

Tolerant of drought and coffee leaf rust but highly susceptible to coffee berry disease. Found mostly in Uganda.

STATURE

Tall



LEAF TIP COLOR

Light Bronze



BEAN SIZE

Average



YIELD POTENTIAL

High



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Low

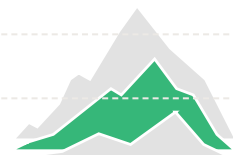


VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

Medium



COFFEE LEAF RUST

Tolerant



SUSCEPTIBLE

RESISTANT

NEMATODE

Susceptible



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Susceptible



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Unknown
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Drought tolerant. Some tolerance to White Stem Borer has been documented.

Background

GENETIC DESCRIPTION	Bourbon-Typica group (Bourbon related)
LINEAGE	A selection of Kent. Likely Bourbon-like genetic background.
BREEDER	Lyamungu Research Station, Tanzania



Lempira - *Catimor*

High yielding variety adapted to warmest zones and acidic soils.

STATURE

Dwarf/Compact



LEAF TIP COLOR

Bronze



BEAN SIZE

Average



YIELD POTENTIAL

High



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Low



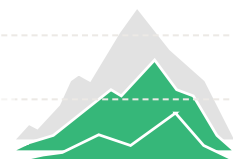
VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

Low, Medium

5°N to 5°S: 1000m-1600m
5-15°N and 5-15°S: 700m-1300m
>15°N and >15°S: 400m-1000m



COFFEE LEAF RUST

Susceptible



SUSCEPTIBLE

RESISTANT

NEMATODE

Susceptible



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Susceptible



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Low
PLANTING DENSITY	5000-6000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Recently, Lempira has been confirmed through scientific evaluation to be susceptible to coffee leaf rust in Honduras and maybe possibly also be susceptible in other areas of Central America. Susceptible to Ojo de Gallo. Recommended for acidic soils and soils rich aluminium. Recommended for warmest zones.

Background

GENETIC DESCRIPTION	Introgressed (Catimor related)
LINEAGE	Timor Hybrid 832/1 x Caturra
BREEDER	Instituto Hondureño del Café (IHCAFE)



Limani - *Sarchimor*

An elusive Puerto Rican variety.

STATURE

Dwarf/Compact



LEAF TIP COLOR

Bronze



BEAN SIZE

Average



YIELD POTENTIAL

Good



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



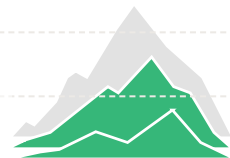
VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

Low, Medium

5°N to 5°S: 1000m-1600m
5-15°N and 5-15°S: 700m-1300m
>15°N and >15°S: 400m-1000m



COFFEE LEAF RUST

Resistant

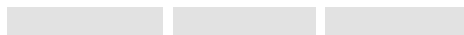


SUSCEPTIBLE

RESISTANT

NEMATODE

Unknown



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Unknown



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	High
PLANTING DENSITY	5000-6000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	"True" Limani is very difficult to find because of issues with genetic traceability dating to its original release in Puerto Rico. Consequently, plants identified as Limani rarely match the original reference. This doesn't necessarily mean that plants identified as Limani won't perform well, only that it is difficult to predict performance, for example, or resistance to coffee leaf rust. True Limani is supposed to be well adapted to medium altitudes (above 1000 m) and rust resistant.

Background

GENETIC DESCRIPTION	Introgressed (Sarchimor related)
LINEAGE	Timor Hybrid 832/2 x Villa Sarchi
BREEDER	Unknown, in Puerto Rico



Maragogipe

Good to very good cup quality in Central America, but highly susceptible to rust. Very low yielding, large leaves and large internodes.

STATURE

Tall



LEAF TIP COLOR

Bronze



BEAN SIZE

YIELD POTENTIAL

Low



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good

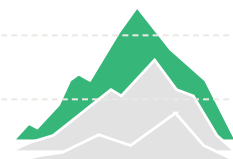


VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

High



COFFEE LEAF RUST

Susceptible



SUSCEPTIBLE

RESISTANT

NEMATODE

Susceptible



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Susceptible



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 4
NUTRITION REQUIREMENT	Low
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Very High
PLANTING DENSITY	3000-4000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Due to the low productivity of Maragogipe, Pacamara is considered a better option. Maragogipe beans are especially large, and the plant also has unusually large spacing between internodes and leaf size.

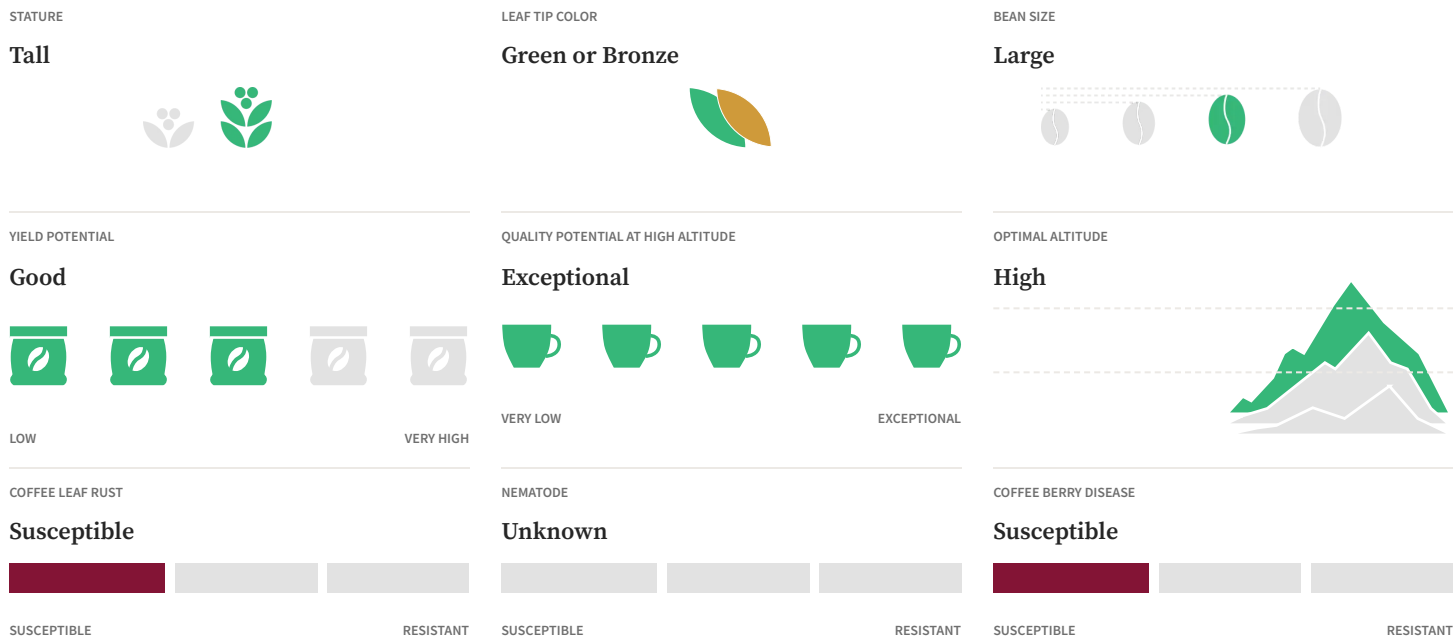
Background

GENETIC DESCRIPTION	Bourbon-Typica group (Typica related)
LINEAGE	A natural mutation of Typica
BREEDER	None



Mibirizi

Exceptional cup quality and drought tolerant, but highly susceptible to major diseases. Important variety for smallholder coffee growers in Rwanda and Burundi.



Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	Low
RIPENING OF FRUIT	Unknown
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Drought tolerant and resilient (e.g., can cope with low management and adverse environmental conditions).

Background

GENETIC DESCRIPTION	Bourbon-Typica group (Typica related)
LINEAGE	Likely Typica-like genetic background.
BREEDER	None



Milenio - H10

Very high-yielding variety, with rust resistance and good quality at elevations above 1300 meters. Variety not uniform.

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Large



YIELD POTENTIAL

Very High



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good



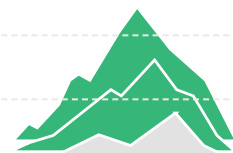
VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

Medium, High

5°N to 5°S: >1200m
5–15°N and 5–15°S: >900m
>15°N and >15°S: >700m



COFFEE LEAF RUST

Resistant



SUSCEPTIBLE

RESISTANT

NEMATODE

Susceptible



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Tolerant



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Unknown
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Very High
PLANTING DENSITY	4000-5000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	An important note about F1 hybrids: Seeds taken from hybrid plants will not have the same characteristics as the parent plants. This is called "segregation." It means that the child plant will not look or behave the same as the parent, with potential losses of yield, disease resistance, quality, or other agronomic performance traits. The variety should only be reproduced through clonal propagation and purchased from trusted nurseries.

Background

GENETIC DESCRIPTION	F1 hybrid (introgressed)
LINEAGE	T5296 x Rume Sudan
BREEDER	CIRAD-CATIE-ICAFFE-IHCAFFE-PROCAFFE-ANACAFE



Mundo Maya - EC16

Very high yielding variety if planted in healthy soil, with very good quality at elevations above 1300 meters. Well-adapted to agroforestry conditions.

STATURE

Dwarf/Compact



LEAF TIP COLOR

Bronze



BEAN SIZE

Large



YIELD POTENTIAL

High



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good



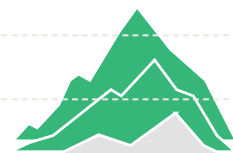
VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

Medium, High

5°N to 5°S: >1200m
5–15°N and 5–15°S: >900m
>15°N and >15°S: >700m



COFFEE LEAF RUST

Resistant



SUSCEPTIBLE

RESISTANT

NEMATODE

Resistant



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Tolerant



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Very High
PLANTING DENSITY	4000-5000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Nematodes: Variety not resistant to <i>Pratylenchus spp.</i> Is resistant to some <i>Meloidogyne spp.</i> An important note about F1 hybrids: Seeds taken from hybrid plants will not have the same characteristics as the parent plants. This is called "segregation." It means that the child plant will not look or behave the same as the parent, with potential losses of yield, disease resistance, quality, or other agronomic performance traits. The variety should only be reproduced through clonal propagation and purchased from trusted nurseries.

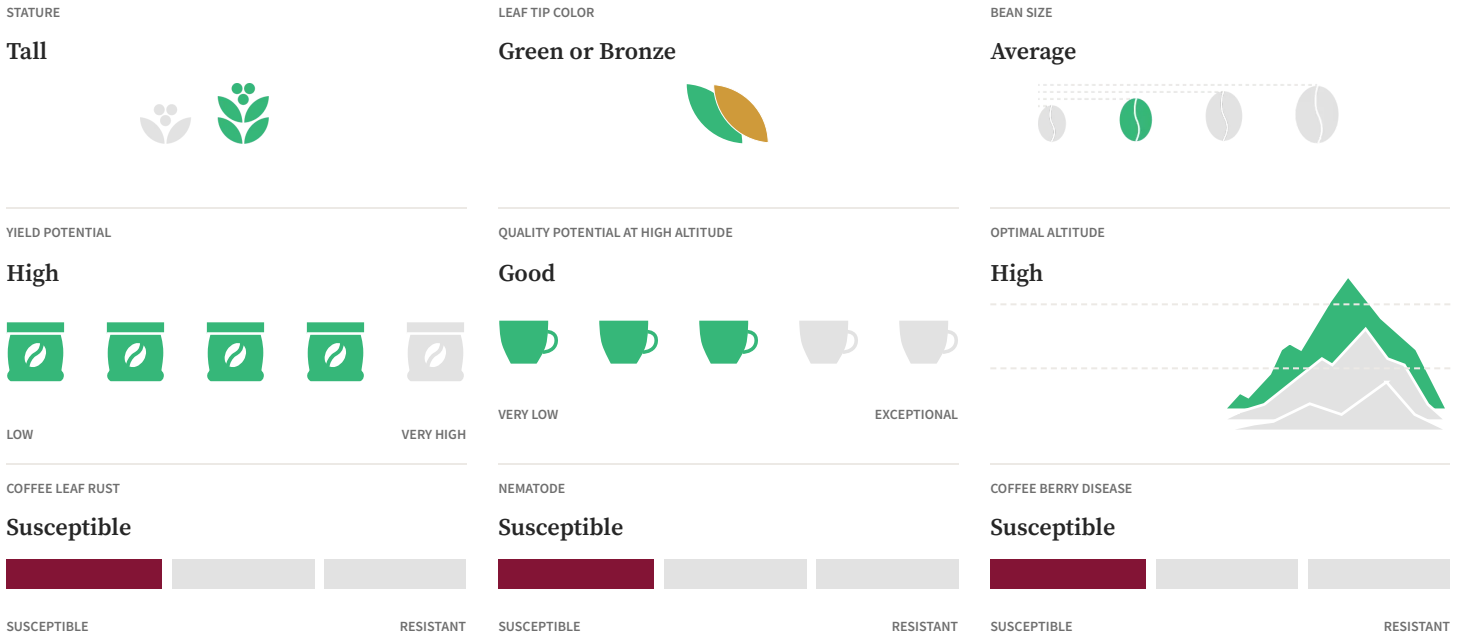
Background

GENETIC DESCRIPTION	F1 hybrid (introgressed)
LINEAGE	T5296 x wild Ethiopian accession "ET01" (CATIE collection)
BREEDER	CIRAD-ECOM



Mundo Novo

A vigorous and productive plant with good quality cup but susceptible to major diseases. Grown widely in South America, but rarely in Central America and the Caribbean.



Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	3000-4000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	In Peru, recommended elevation is >1500m.

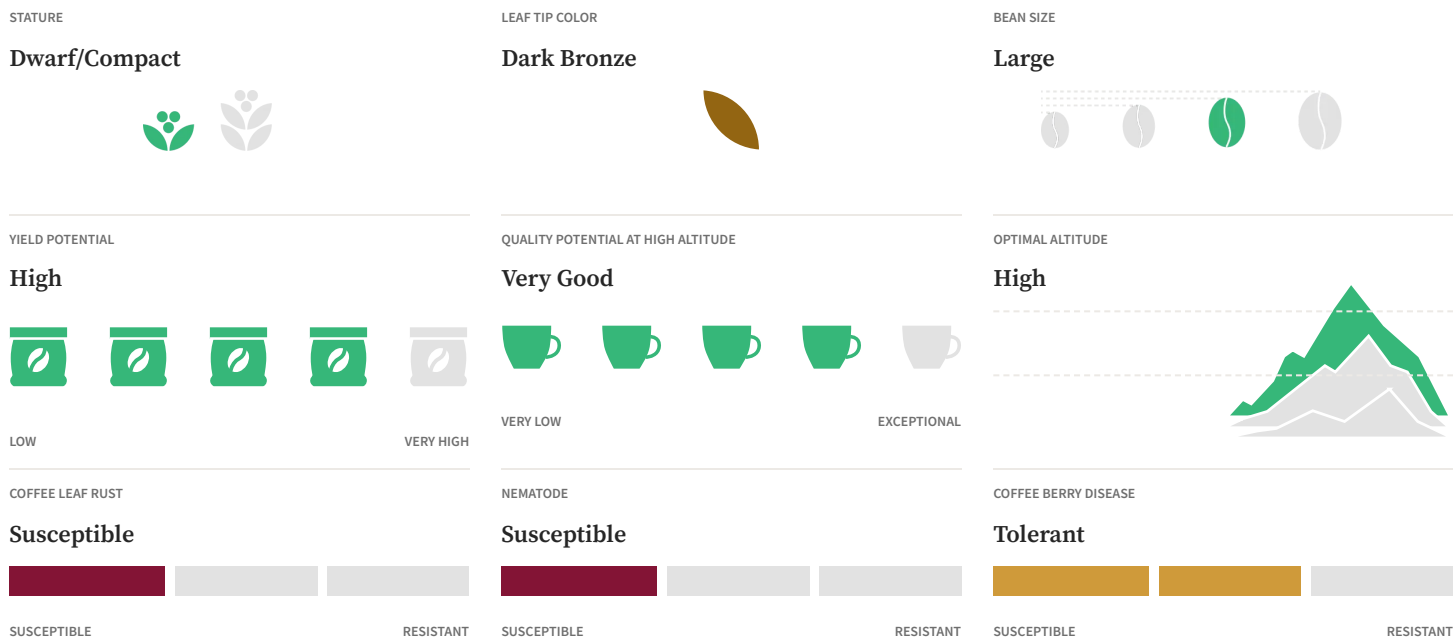
Background

GENETIC DESCRIPTION	Bourbon-Typica group (Typica and Bourbon related)
LINEAGE	Typica x Bourbon
BREEDER	Instituto Agronómico de Campinas (IAC), Brasil



Nayarita - EC19

High yielding variety at high altitudes with very good cup quality.



Agronomics

YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Very High
PLANTING DENSITY	3000-4000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	An important note about F1 hybrids: Seeds taken from hybrid plants will not have the same characteristics as the parent plants. This is called "segregation." It means that the child plant will not look or behave the same as the parent, with potential losses of yield, disease resistance, quality, or other agronomic performance traits. The variety should only be reproduced through clonal propagation and purchased from trusted nurseries.

Background

GENETIC DESCRIPTION	F1 hybrid (introgressed)
LINEAGE	Naryelis (Catimor) x wild Ethiopian accession "ET26" (CATIE collection)
BREEDER	CIRAD-ECOM



Nyasaland - *Bugisu local, Nyasa*

Good cup quality, but susceptible to major diseases. Preferred by smallholder farmers in Uganda.

STATURE

Tall



LEAF TIP COLOR

Light Bronze



BEAN SIZE

Average



YIELD POTENTIAL

Good



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



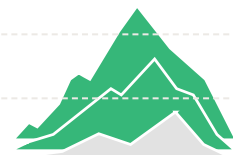
VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

Medium, High

5°N to 5°S: >1200m
5-15°N and 5-15°S: >900m
>15°N and >15°S: >700m



COFFEE LEAF RUST

Susceptible



SUSCEPTIBLE

RESISTANT

NEMATODE

Unknown

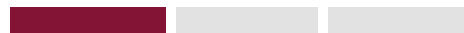


SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Susceptible



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	Low
RIPENING OF FRUIT	Unknown
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Resilient variety (e.g., can cope with low management and adverse environmental conditions).

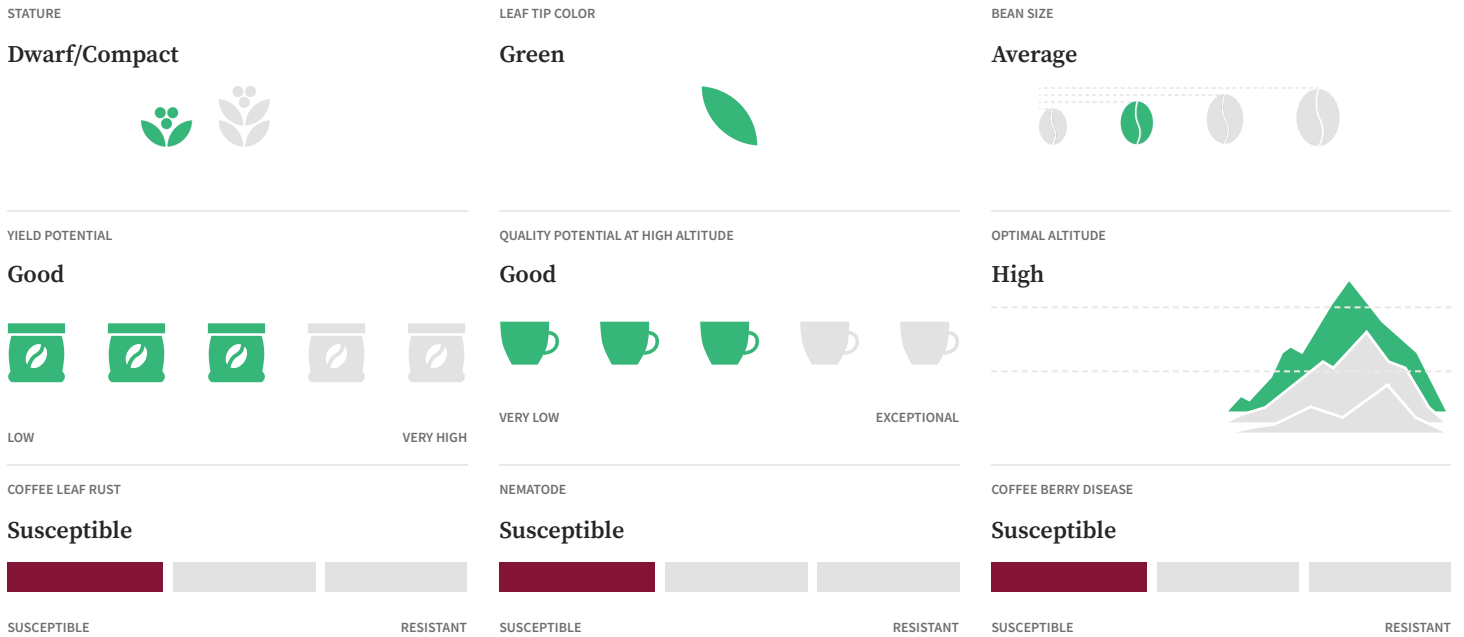
Background

GENETIC DESCRIPTION	Bourbon-Typica group (Typica related)
LINEAGE	Likely Typica-like genetic background.
BREEDER	None



Pacas

Standard quality in Central America. Very high susceptibility to coffee leaf rust.



Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	5000-6000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	

Background

GENETIC DESCRIPTION	Bourbon-Typica group (Bourbon related)
LINEAGE	A natural mutation of Bourbon.
BREEDER	Instituto Salvadoreño de Investigaciones del Café (ISIC)



Pache

A compact plant with medium yield and good quality, but highly susceptible to major diseases.

STATURE

Dwarf/Compact



LEAF TIP COLOR

Bronze



BEAN SIZE

Large



YIELD POTENTIAL

Medium



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

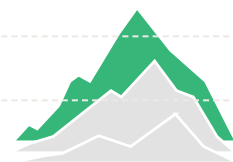


VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

High



COFFEE LEAF RUST

Susceptible



SUSCEPTIBLE

RESISTANT

NEMATODE

Susceptible



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Susceptible



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 4
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	5000-6000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	It is best adapted to elevations above 1200 meters and in regions with less than 2,500 millimeters of rainfall per year areas. Recommended elevation in Peru is >1400 meters.

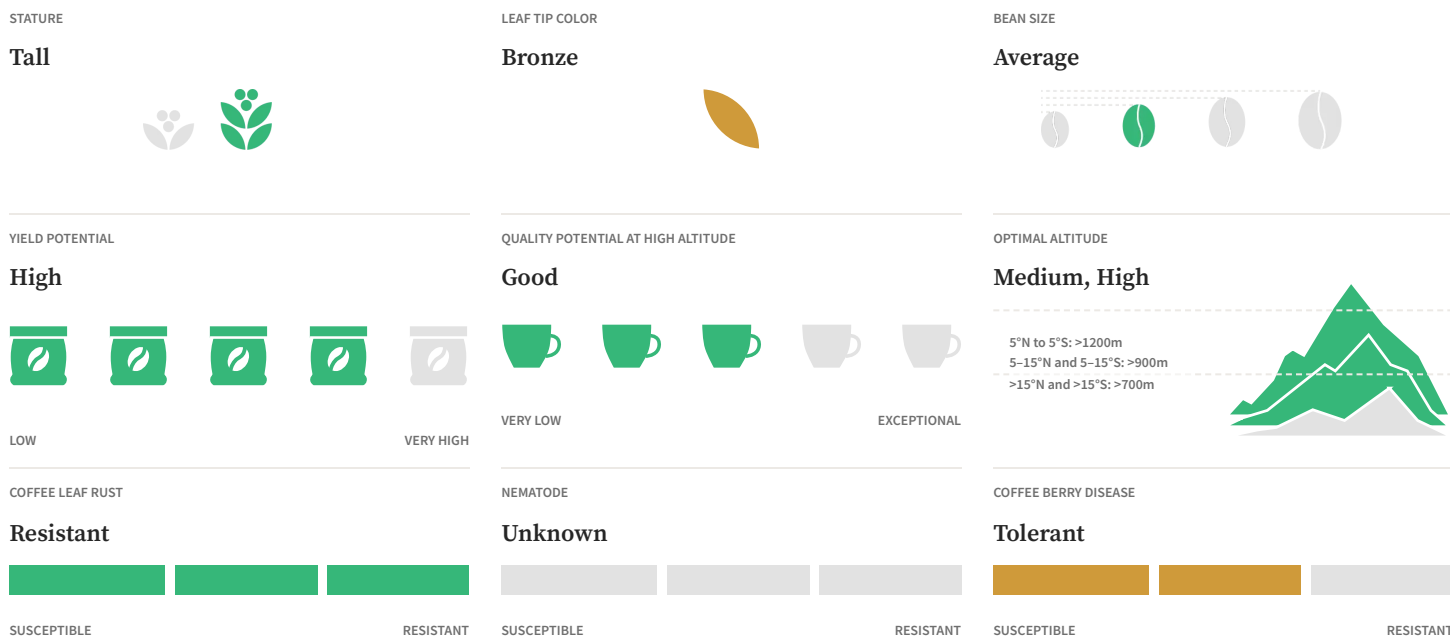
Background

GENETIC DESCRIPTION	Bourbon-Typica group (Typica related)
LINEAGE	A natural mutation of Typica.
BREEDER	None



Pop3303/21

High yielding with tolerance to drought, coffee leaf rust, and coffee berry disease. Adapted to a wide range of ecosystems. Found mostly in Rwanda.



Agronomics

YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Unknown
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	2000-3000 plants/ha (using multiple-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Drought tolerant. Significantly prone to die back.

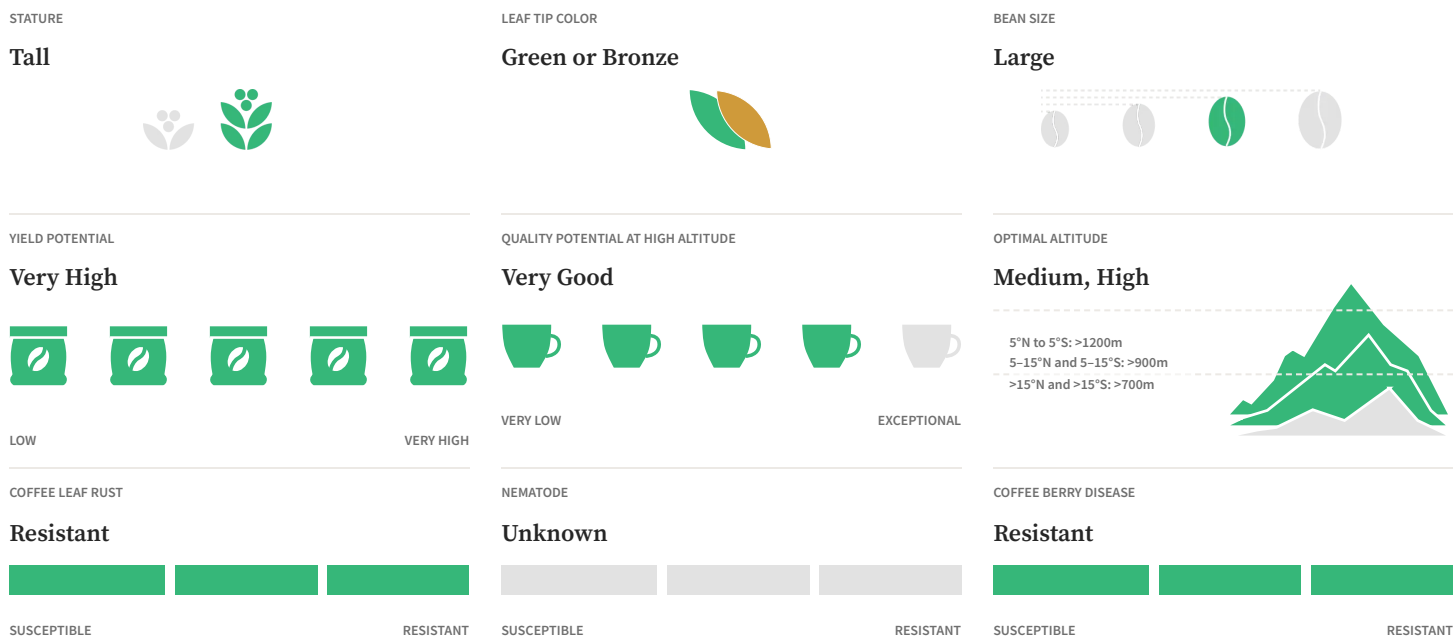
Background

GENETIC DESCRIPTION	Bourbon-Typica group (Typica related)
LINEAGE	A selection of BMJ (Blue Mountain Jamaica) in Rwanda, related to but distinct from Typica.
BREEDER	Rwanda Agricultural Board (RAB)



RAB C15

High yielding tall variety resistant to rust and coffee berry disease recently released in Rwanda.



Agronomics

YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Unknown
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	2000-3000 plants/ha (using multiple-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Vigorous.

Background

GENETIC DESCRIPTION	Introgressed (Other)
LINEAGE	A selection of the Indian variety Sln.6 (Kent x <i>C. robusta</i>). A population composite variety.
BREEDER	Rwanda Agricultural Board (RAB)



Ruiru 11

High-yielding, Dwarf/Compact hybrid tolerant to coffee leaf rust and resistant to coffee berry disease (CBD). Released in Kenya.

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green or Bronze



BEAN SIZE

Large



YIELD POTENTIAL

Very High



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



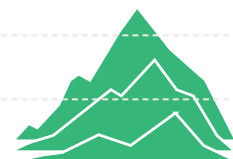
VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

Low, Medium, High

5°N to 5°S: >1000m
5–15°N and 5–15°S: >700m
>15°N and >15°S: >400m



COFFEE LEAF RUST

Tolerant



SUSCEPTIBLE

RESISTANT

NEMATODE

Susceptible



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Resistant



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	2000-3000 plants/ha (using multiple-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	

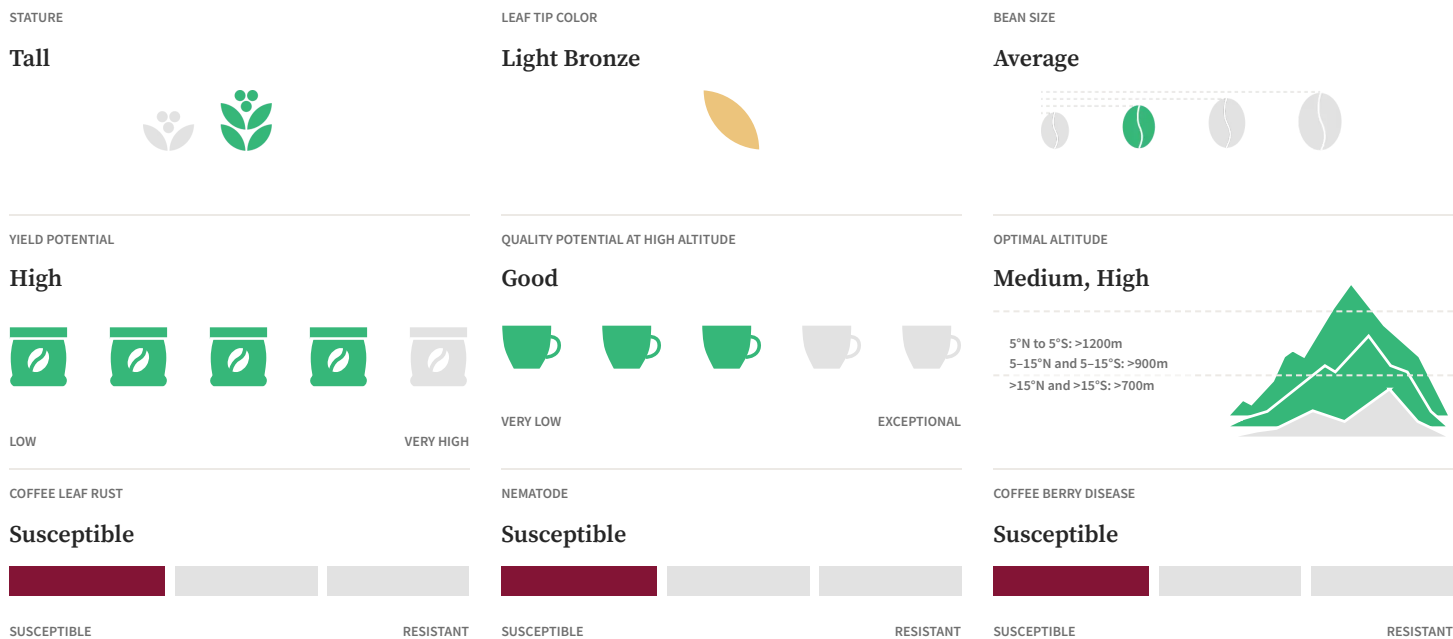
Background

GENETIC DESCRIPTION	F1 hybrid (introgressed)
LINEAGE	Composite variety made of many varieties. Catimor (female parent) x multicross selection involving K7, SL28, N39, Rume Sudan, among others (male parent).
BREEDER	Coffee Research Foundation (now Kenya Agricultural and Livestock Research Organization, KALRO)



SL14

A high-yielding tall variety with drought and cold tolerance. Found mostly in Kenya and Uganda.

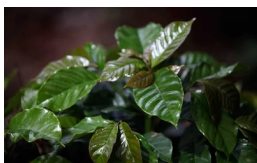


Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	Low
RIPENING OF FRUIT	Unknown
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Drought and cold tolerant.

Background

GENETIC DESCRIPTION	Bourbon-Typica group (Typica related)
LINEAGE	Typica-like genetic background.
BREEDER	Scott Agricultural Laboratories



SL34

Exceptional cup quality but highly susceptible to coffee berry disease. Found mostly in Kenya.

STATURE

Tall



LEAF TIP COLOR

Dark Bronze



BEAN SIZE

Large



YIELD POTENTIAL

High



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Exceptional



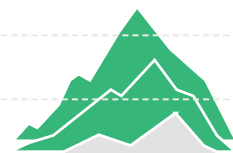
VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

Medium, High

5°N to 5°S: >1200m
5–15°N and 5–15°S: >900m
>15°N and >15°S: >700m



COFFEE LEAF RUST

Susceptible



SUSCEPTIBLE

RESISTANT

NEMATODE

Susceptible



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Susceptible



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Unknown
CHERRY TO GREEN BEAN OUTTURN	High
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	SL34 is adapted to high altitude areas with good rainfall. It is characterized by dark bronze shoot tipped plants with a few green-tipped strains. The laterals have semi-erect habit which tend to droop on older primary branches.

Background

GENETIC DESCRIPTION	Bourbon-Typica group (Typica related)
LINEAGE	Typica-like genetic background.
BREEDER	Scott Agricultural Laboratories



SL28

Drought tolerant and very good cup quality potential, but susceptible to major diseases. Found commonly in Kenya, Malawi, Uganda, Zimbabwe.

STATURE

Tall



LEAF TIP COLOR

Green



BEAN SIZE

Large



YIELD POTENTIAL

Very High



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Exceptional



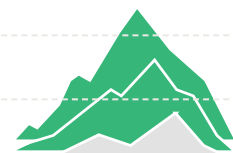
VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

Medium, High

5°N to 5°S: >1200m
5–15°N and 5–15°S: >900m
>15°N and >15°S: >700m



COFFEE LEAF RUST

Susceptible

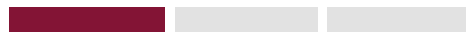


SUSCEPTIBLE

RESISTANT

NEMATODE

Susceptible



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Susceptible



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	Low
RIPENING OF FRUIT	Unknown
CHERRY TO GREEN BEAN OUTTURN	High
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Drought tolerant. Shoot tips are mainly green but occasionally bronze types are observed. Primary branches are predominantly semi-erect, but tend to become decumbent or drooping after successive crop-bearing seasons.

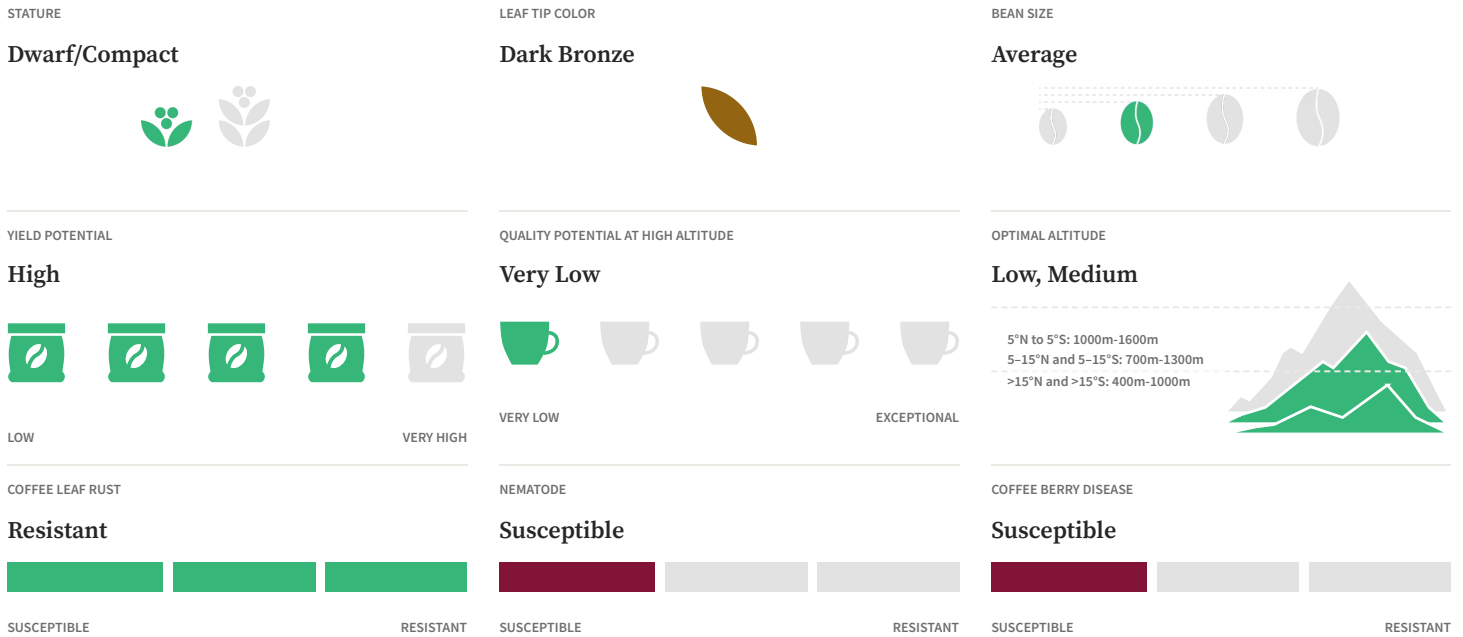
Background

GENETIC DESCRIPTION	Bourbon-Typica group (Bourbon related)
LINEAGE	Selection of "Tanganika Drought Resistant." Bourbon-like genetic background.
BREEDER	Scott Agricultural Laboratories



T5175 - *Catimor*

High-yielding plant adapted to lowest altitudes. Requires high fertilization.
Variety not uniform.



Agronomics

YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Very High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Low
PLANTING DENSITY	4000-5000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Highly susceptible to Ojo de Gallo. T5175 is not homogeneous; plants are not stable from one generation to the next.

Background

GENETIC DESCRIPTION	Introgressed (Catimor related)
LINEAGE	Timor Hybrid 832/1 x Caturra
BREEDER	Instituto del Café de Costa Rica (ICAPE)



Starmaya

High yielding plant adapted to medium altitudes. Notably high acidity in the cup. The first coffee F1 hybrid propagated by seed.

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Large



YIELD POTENTIAL

High



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good

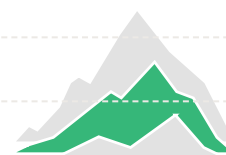


VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

Medium



COFFEE LEAF RUST

Resistant



SUSCEPTIBLE

RESISTANT

NEMATODE

Unknown



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Unknown



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	High
PLANTING DENSITY	4000-5000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Variety not uniform. When planted, approximately 15% of plants will "segregate" (have different appearance/performance than the standard). An important note about F1 hybrids: Seeds taken from hybrid plants will not have the same characteristics as the parent plants. This is called "segregation." It means that the child plant will not look or behave the same as the parent, with potential losses of yield, disease resistance, quality, or other agronomic performance traits. The variety should only be reproduced through clonal propagation and purchased from trusted nurseries.

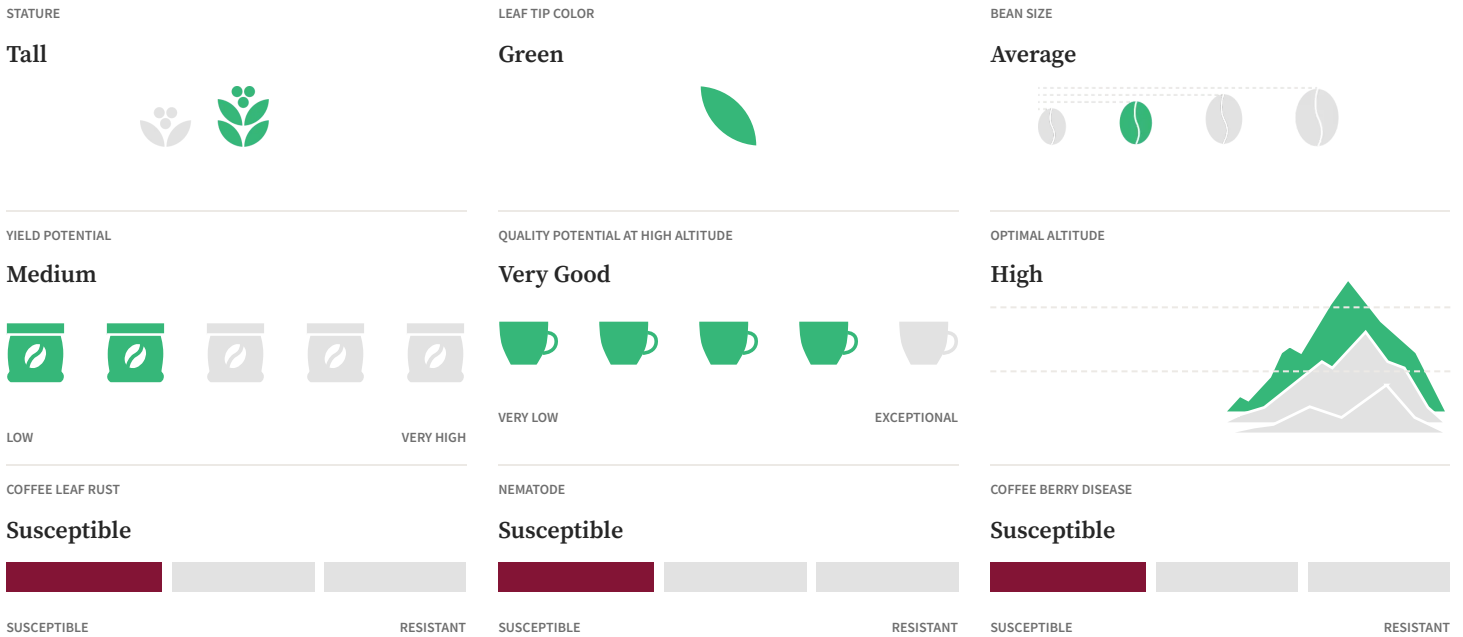
Background

GENETIC DESCRIPTION	F1 hybrid (introgressed)
LINEAGE	Marsallela x wild Ethiopian/Sudanese natural mutant
BREEDER	CIRAD-ECOM



Tekisic - Improved Bourbon

A variety selected in El Salvador, and known for very good cup quality in the highest altitudes.



Agronomics

YEAR OF FIRST PRODUCTION	Year 4
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Early
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	3000-4000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	-

Background

GENETIC DESCRIPTION	Bourbon-Typica group (Bourbon related)
LINEAGE	A selection of the Bourbon variety
BREEDER	Instituto Salvadoreño de Investigaciones del Café (ISIC)



T5296 - *Sarchimor*

Well-adapted to medium altitudes. Variety not uniform.

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Large



YIELD POTENTIAL

Good



LOW

VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



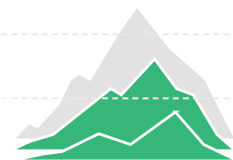
VERY LOW

EXCEPTIONAL

OPTIMAL ALTITUDE

Low, Medium

5°N to 5°S: 1000m-1600m
5-15°N and 5-15°S: 700m-1300m
>15°N and >15°S: 400m-1000m



COFFEE LEAF RUST

Resistant



SUSCEPTIBLE

RESISTANT

NEMATODE

Unknown



SUSCEPTIBLE

RESISTANT

COFFEE BERRY DISEASE

Tolerant



SUSCEPTIBLE

RESISTANT

Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	High
PLANTING DENSITY	5000-6000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	T5296 not uniform; plants are not stable from one generation to the next. Nematodes: Not resistant to <i>Pratylenchus</i> spp. There may be varying degrees of resistance to <i>Meloidogyne exigua</i> .

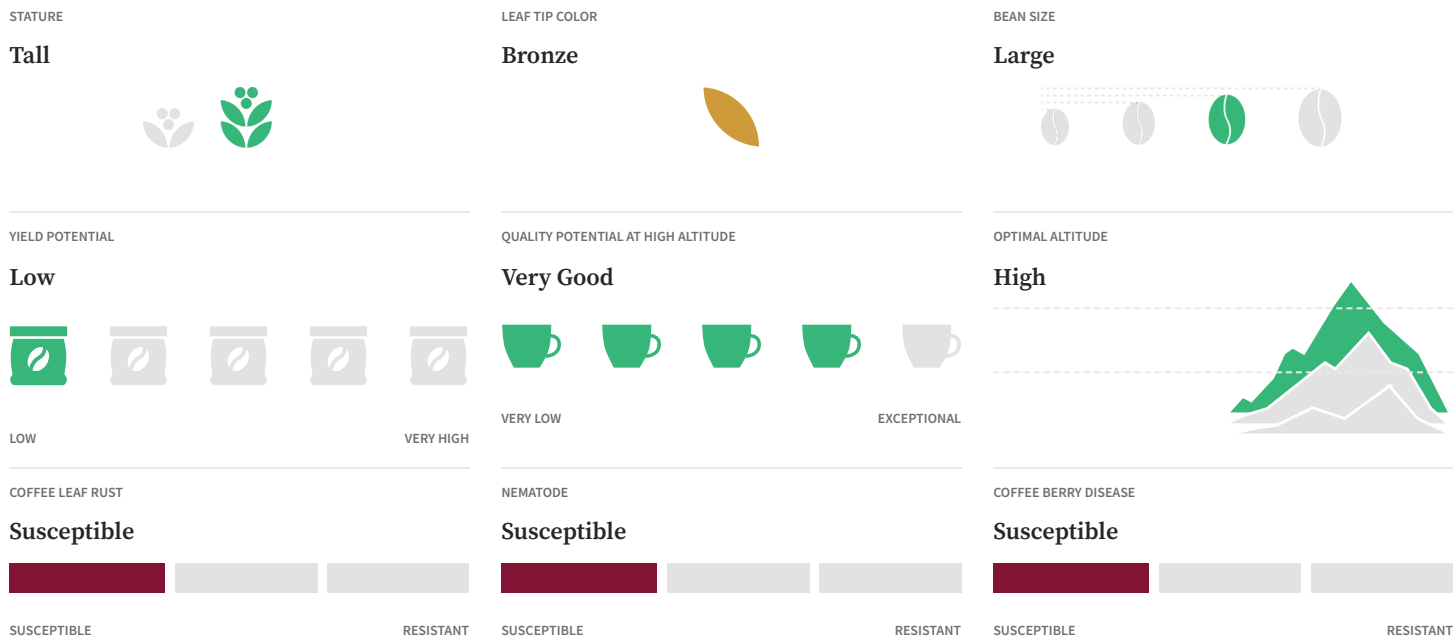
Background

GENETIC DESCRIPTION	Introgressed (Sarchimor related)
LINEAGE	Timor Hybrid C1FC 832/2 x Villa Sarchi
BREEDER	-



Typica

One of the most culturally and genetically important C. arabica coffees in the world, with high quality in Central America. Very high susceptibility to coffee leaf rust, well-adapted to the coldest conditions.



Agronomics

YEAR OF FIRST PRODUCTION	Year 4
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	3000-4000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	-

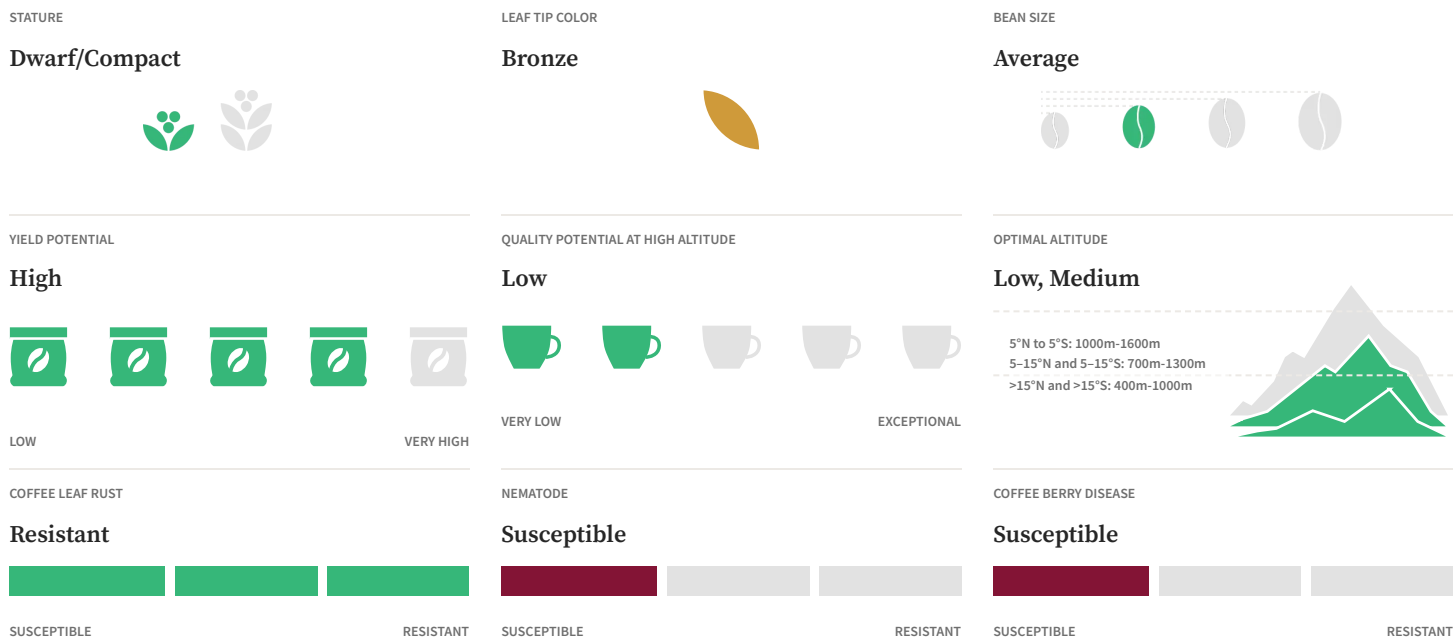
Background

GENETIC DESCRIPTION	Bourbon-Typica group (Typica related)
LINEAGE	Also called Criollo (Creole), Indio (Indian), Arábigo (Arabica), Plume Hidalgo, Blue Mountain, and Sumatra.
BREEDER	None



T8667 - *Catimor*

High-yielding variety, resistant to rust, and adapted to warmest zones and acidic soils.



Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Low
PLANTING DENSITY	5000-6000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Susceptible to Ojo de Gallo, recommended for acidic soils and soils rich in aluminum, as well as warm climates. In Peru, the recommended elevation is between 800 and 1400 meters.

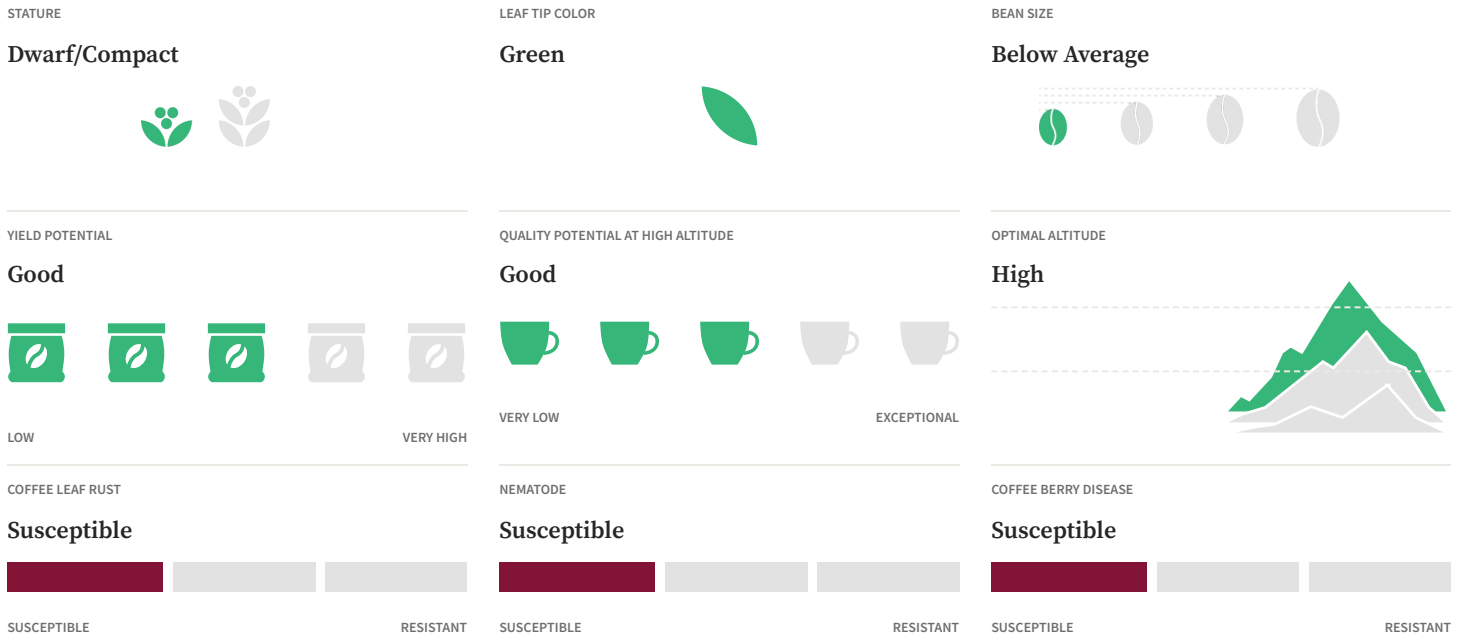
Background

GENETIC DESCRIPTION	Introgressed (Catimor related)
LINEAGE	Timor Hybrid 832/1 x Caturra
BREEDER	None



Villa Sarchi

Well-adpated to highest altitude conditions and tolerant of strong winds.



Agronomics

YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Average
PLANTING DENSITY	5000-6000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Well-adpated to highest altitude conditions and tolerant of strong winds.

Background

GENETIC DESCRIPTION	Bourbon-Typica group (Bourbon related)
LINEAGE	A natural mutation of Bourbon
BREEDER	Instituto del Café de Costa Rica (ICAPE)

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