



**WORLD
COFFEE
RESEARCH**

ARABICA COFFEE VARIETIES

A global catalog of varieties covering:
Costa Rica, El Salvador, Guatemala, Honduras, Jamaica, Kenya,
Malawi, Nicaragua, Panama, Peru, Dominican Republic, Rwanda,
Uganda, Zambia, Zimbabwe

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



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PARTNERS

This catalog was developed in consultation with coffee experts from across Central America and Africa, with funding from USAID and UTZ. It is the result of visits to 16 countries and interviews of nearly 180 people from over 100 private and public bodies involved in the coffee sectors in Central America, the Caribbean, and Africa.

Costa Rica

Centro de Investigaciones de 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)

Panama

Instituto de Investigación Agropecuaria de Panamá y el Ministerio de Agricultura (MIDA)

Nicaragua

Instituto Nicaragüense de Tecnología Agropecuaria (INTA)

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

ABOUT THE CATALOG

Information is power. There are dozens of widely cultivated Arabica 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 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.

In Central America, the coffee leaf rust crisis of 2012 affected nearly 600,000 thousand acres of farmland. Nearly 300,000 coffee farmers needed to replant coffee because of it. To make the best possible decision about what kind of coffee to plant on a farm, producers need to know which varieties will be best adapted to their locations and farming approaches.

Meanwhile, most African coffee-producing countries produce substantially lower volumes of coffee than elsewhere (frequently, less than 500 kg of green coffee per hectare, compared with 1000 kg to 2500kgs per hectare or more). This has profound impacts for farmer livelihoods when farmers are paid per pound of cherry. There is widespread need for replanting with young trees that are resistant to major diseases and pests (including coffee berry disease, coffee leaf rust, antestia bug and stem borer), and with improved varieties. World Coffee Research believes that over 50% of coffee trees in Africa are more than 50 years old. Nearly all of those are old genetic stock and not well suited for the challenges of the 21st century, changing climates in particular.

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. 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.

Geographical scope

The current version of the 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
- Puerto Rico
- República Dominicana
- Rwanda
- Uganda
- Zambia
- Zimbabwe

A living document

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

Online catalog

An extended version of *Arabica Coffee Varieties* is available in English and Spanish for free download online. It contains profiles of 55 varieties and includes detailed histories.



varieties.worldcoffeeresearch.org

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.

VARIABLES

Stature

What is the growth habit of the plant?

Tall, Dwarf/Compact



Leaf Tip Color

What color are the tips of new leaves?

Green, Light Bronze, Bronze, Dark Bronze, Green or Bronze



Bean Size

How big are the coffee beans?

Below Average, Average, Large, Very Large



For reference, Caturra = Average, SL28 = Large, and Maragogipe = Very Large

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	Low	Medium	High
5°N to 5°S	1000-1200 m	1200-1600 m	>1600 m
15°N to 5°N and 5°S to 15°S	700-900 m	900-1300 m	>1300 m
>15°N and >15°S	400- 700 m	700-1000 m	>1000 m

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



Yield Potential

How much fruit will the coffee tree produce?
Low, Medium, Good, High, Very high



For reference, Caturra = Good and SL28 = Good

Coffee Leaf Rust

Is the plant susceptible to leaf rust?
Resistant, tolerant, susceptible



*Coffee rust is a foliar disease of coffee caused by the fungus *Hemileia vastatrix* that causes defoliation and may result in severe crop losses. Note: Plant diseases are constantly evolving. A variety that is resistant to a disease today may not be resistant tomorrow; genetic resistance can break down due to the emergence of new races (evolution of the disease) or the movement of old races into new regions. For more information, see "A note about coffee leaf rust resistance" below.*

Coffee Berry Disease (CBD)

Is the plant susceptible to CBD?

Resistant, tolerant, susceptible

CBD is a coffee disease that affects the fruit. It is caused by the fungus Colletotrichum kahawae. Currently, CBD is not present in Central America. Note: Plant diseases are constantly evolving. A variety that is resistant to a disease today may not be resistant tomorrow; genetic resistance can break down due to the emergence of new races (evolution of the disease) or the movement of old races into new regions.

Nematodes

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

Resistant, tolerant, susceptible

Nematodes are microscopic animals that infect the roots and can cause wilting and death of the plant. Note: Plant diseases are constantly evolving. A variety that is resistant to a disease today may not be resistant tomorrow.

Year of First Production

When will the tree produce its first fruit?

Year 2, Year 3, Year 4

Nutrition Requirement

How much nutrition (e.g., compost, fertilizer) does this plant require?

Low, Medium, High, Very High

Ripening of Fruit

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

Early, Average, Late, Very late

For reference, Caturra = Average

Cherry to Green Bean Ratio (Outturn)

What is the size of the bean in relation to the fruit?

Low, Average, High, Very High

For reference, Caturra = Average, SL28 = High

Planting Density

What spacing should you use for planting this variety?

1000-2000 a/ha (using multiple-stem pruning)

2000-3000 a/ha (using multiple-stem pruning)

Less than 2000 a/ha (using multiple-stem pruning)

3000-4000 a/ha (using single-stem pruning)

4000-5000 a/ha (using single-stem pruning)

5000-6000 a/ha (using single-stem pruning)

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.

Lineage

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

Genetic Description

Ethiopian/landrace

Bourbon-Typica group/Typica

Bourbon-Typica group/Bourbon

Bourbon-Typica group/Typica+Bourbon

Introgressed/Catimor

Introgressed/Sarchimor

F1 hybrid/introgressed

F1 hybrid/not introgressed

To learn more about coffee genetic groups, see “About Coffee Varieties” on the next page.

Intellectual Property Right

Is the variety in the public domain, registered in the international database of varieties, called the International Union for the Protection of New Varieties of Plants (UPOV), or other?

Breeder

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

ABOUT COFFEE VARIETIES

Coffea arabica is one of two species of coffee plants that are in wide cultivation globally. (The other is *C. canephora*, commonly called Robusta.) 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.

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

Most commonly known varieties meet the above criteria. However, some do not. For example, “Catimor” and “Sarchimor” are not distinct varieties according to this definition (see below). Three 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 some key coffee regions, but it’s important to know they lack uniformity and stability and therefore do not meet the definition of variety laid out here.

Genetic modification in coffee

All of 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.

Main Types

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.

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 below.

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/Other)

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 Batian, were created from complex multiple crosses involving the Timor Hybrid; RAB C15 is the only introgressed variety in this catalog that was not created using the Timor Hybrid—it originates from a controlled cross made by Indian breeders between *C. canephora* 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.

A note about coffee leaf rust resistance, continued

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 within 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:

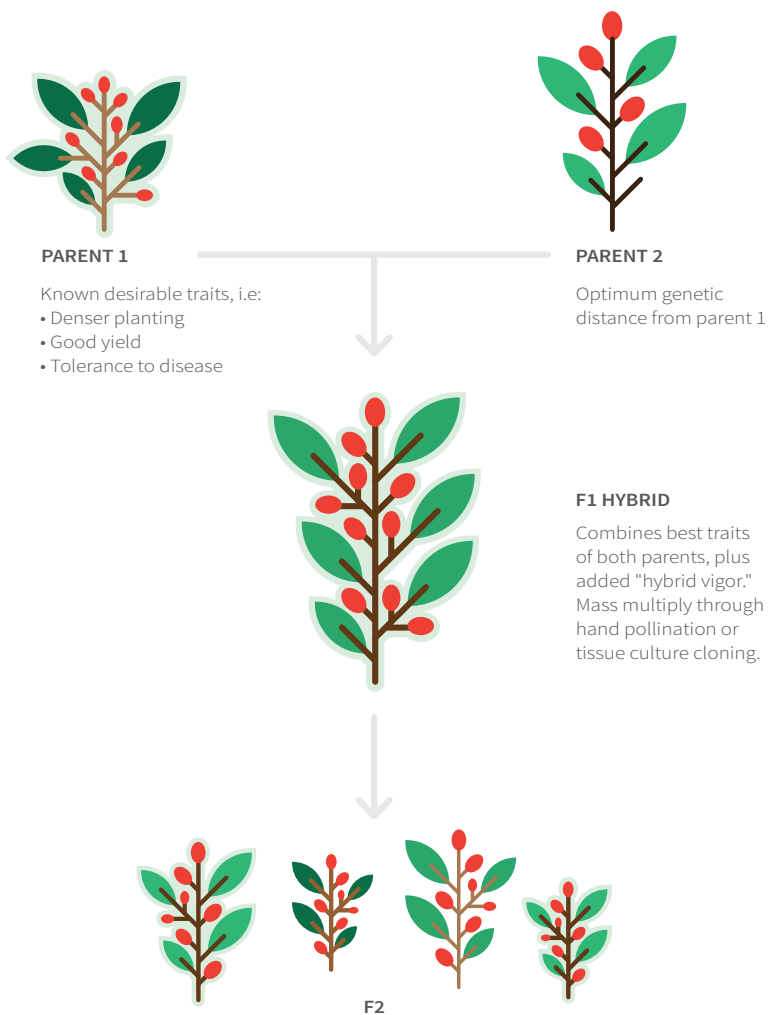
1. The breeder of the variety has issued an official statement announcing the breakdown of resistance
2. World Coffee Research has validated the appearance of rust on a historically resistant variety using DNA fingerprinting and consultation with the breeder (if there is one), and local experts.

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 offspring (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.



HOW DO F1 HYBRIDS WORK?

The second generation (e.g., plants created from seeds of the F1 hybrid) will "segregate." The result is a group of plants that vary widely in performance, and do not achieve the ideal combination of traits of the F1 hybrid. For this reason, it's recommended that farmers don't use F2 seeds.

History of Bourbon and Typica coffee and coffee's movement around the globe

Bourbon and Typica compose the most culturally and genetically important groups of *C. arabica* coffees in the world. Historians believe that coffee seeds were taken from the coffee forests of Southwestern Ethiopia to Yemen, where it was cultivated as a crop. Recent genetic tests have confirmed that Bourbon and Typica were the main seeds taken from Ethiopia to Yemen. From Yemen, descendants of Bourbon and Typica spread around the world, forming the basis of 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 the 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.

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 the French King Louis IV; it was planted in the greenhouse of the Jardin des Plantes and quickly produced seeds.

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 Typica 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, Typica 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.

Typica-related varieties arrived later to Africa. Plants from Jamaica were sent to Kenya in 1913. Seeds were also sent from Indian plantations and from Scottish missionaries in Yemen in the same period.

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 the 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. (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. African coffee farmers introduced some of this Indian seed first to Tanzania, and then to Kenya (the Kent variety in particular was an important progenitor of local selections for many decades).

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

OBTAINING THE RIGHT PLANTS

World Coffee Research does not offer varieties for sale. If you are interested in obtaining plants or seeds of this variety, check the registry of WCR VerifiedSM nurseries and seed producers. If they are not available from a Verified provider, contact the breeder and/or national coffee institute in your country.

Finding the right type of coffee is a critical first step. But it is also crucial to make sure that when a producer is buying seeds or seedlings, they are getting what they paid for: a healthy plant that is the correct type. It is not uncommon for a coffee producer to acquire plants that turn out not to be the variety she or he thought. This can have serious consequences, if for example the farmer thought he was buying a variety of resistant to coffee leaf rust and it turned out not to be. Being certain of the genetic purity of a variety is a way to reduce a farmer's risk. A plant that is not healthy is not a good plant. Some plants that look healthy at a young age but have hidden problems like bent roots that prevent the farmer from achieving economic success with it.

WCR Verified: How It Works

In order to ensure that coffee producers have access to genetically pure, disease-free, vigorous plants and seeds, WCR launched a program of seed and nursery verification in 2017.

Nurseries and seed producers participating in the WCR VerifiedSM program are evaluated with the following criteria:

- The nursery or seed producer follows good practices in order to produce healthy plants that are free of pests and diseases.
- The nursery or the seed producer has available information about the agronomic characteristics of different available varieties so that the producer can make an informed decision.
- The variety has been verified using the DNA genetic fingerprints of World Coffee Research so that producers can be sure of what they are buying.
- The nursery or the producer of seed of credit to the breeders and their rights are respected.

Become a producer of verified materials (plants and seeds)

If you run a nursery and / or own a seedbed or bank and are interested in joining the WCR VerifiedSM Program to sell verified material, please contact: coffee@nsf.org.

Where to find verified varieties?

For up-to-date information on whether these varieties are available through the World Coffee Research Verified program, please visit our website: varieties.worldcoffeeresearch.org/verified.

The WCR VerifiedSM program is currently available only for Central America.

CHOOSING THE RIGHT VARIETY BASED ON ALTITUDE

Low	Medium	High
Batian , Centroamericano, Ruiru 11		
Catimor 129, Caticic, Costa Rica 95, Cuscatleco, Fronton, IAPAR 59, IHCAFE 90, K7, Lempira, Limani, Marsellesa, Obata Rojo, Oro Azteca, Parainema, T5175, T5296, T8667		
	Bourbon Mayaguez 139, KP423, Starmaya	
	Anacafe 14, Bourbon Mayaguez 71, Harar Rwanda, Jackson 2/1257, Milenio, Mundo Maya, Nyasaland, Pop3303/21, RAB C15, SL14, SL28, SL34, Venecia, Villa Sarchi	
		Bourbon, Casiopea, Catuai, Caturra, Evaluna, Geisha, H3, Java, Maragogipe, Mibirizi, Mundo Novo, Nayarita, Pacamara, Pacas, Pache, Tekisic, Typica

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	Low	Medium	High
5°N to 5°S	1000-1200 m	1200-1600 m	>1600 m
15°N to 5°N and 5°S to 15°S	700-900 m	900-1300 m	>1300 m
>15°N and >15°S	400- 700 m	700-1000 m	>1000 m

CHOOSING THE RIGHT VARIETY BASED ON AGRONOMIC PERFORMANCE

	Tall variety	Dwarf variety
<p>Highest quality potential Very good or exceptional or above if grown at 1200 meters or above</p>	Batian, Bourbon, Bourbon Mayaguez 139, Geisha, Harar Rwanda, Java, Maragogipe, Mibirizi, RAB C15, SL28, SL34, Tekisic, Typica	Casiopea, Centroamericano, Evaluna, H3, Milenio, Mundo Maya, Nayarita, Pacamara, Starmaya
<p>Highest yielding potential High or very high</p>	Batian, Bourbon Mayaguez 139, Harar Rwanda, Jackson 2/1257, K7, KP423, Mundo Novo, Pop3303/21, RAB C15, SL14, SL28, SL34	Anacafe 14, Casiopea, Catimor 129, Catisic, Centroamericano, Costa Rica 95, Evaluna,H3, IHCAFE 90, Lempira, Marsellesa, Millenio, Mundo Maya, Nayarita, Obata, Oro Azteca, Ruiru 11, Starmaya, T5175, T8667
<p>Resistant to coffee leaf rust</p>	Pop3303/21, RAB C15	Anacafe 14, Catimor 129, Catisic , Centroamericano, Cuscatleco, Fronton, IAPAR 59, Limani, Marsellesa, Milenio, Mundo Maya, Nayarita, Obata, Oro Azteca, Parainema, Starmaya, T5175, T5296, T8667
<p>Tolerant to CBD</p>	Batian, Java, K7, Pop3303/21, RAB C15	Catimor 129, Centroamericano , Cuscatleco, Evaluna, Marsellesa, Milenio, Mundo Maya, Nayarita, Parainema, Ruiru 11, T5296
<p>Resistant to or tolerante of nematodes Nemaya rootstock is highly resistant to nematodes. Any variety can be grafted onto Nemaya.</p>		Centroamericano, Cuscatleco, Milenio, Mundo Maya, Parainema Resistant to M. exigua only: T5296, IAPAR 59
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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.

Appearance

STATURE

Tall



LEAF TIP COLOR

Green



BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: >1600m
5–15°N and 5–15°S: >1300m
>15°N and >15°S: >1000m

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good



YIELD POTENTIAL

Medium



COFFEE LEAF RUST

Susceptible



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Susceptible



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

Genetics

LINEAGE	—
GENETIC DESCRIPTION	Bourbon-Typica Group (Bourbon-related)

Availability

BREEDER	None
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



BOURBON MAYAGUEZ 139 *BM139*

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

Appearance

STATURE

Tall



LEAF TIP COLOR

Bronze



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: 1200–1600m
5–15°N and 5–15°S: 900–1300m
>15°N and >15°S: 700–1000m

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good



YIELD POTENTIAL

High



COFFEE LEAF RUST

Susceptible



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Unknown

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

Genetics

LINEAGE	Bourbon-like genetic background.
GENETIC DESCRIPTION	Bourbon-Typica Group (Bourbon-related)

Availability

BREEDER	Rwanda Agricultural Board (RAB)
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



BOURBON MAYAGUEZ 71 *BM71*

3

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

Appearance

STATURE

Tall



LEAF TIP COLOR

Bronze



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

Medium



COFFEE LEAF RUST

Susceptible

COFFEE BERRY DISEASE (CBD)

Susceptible

NEMATODES

Unknown

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

Genetics

LINEAGE	Bourbon-like genetic background.
GENETIC DESCRIPTION	Bourbon-Typica Group (Bourbon-related)

Availability

BREEDER	Rwanda Agricultural Board (RAB)
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



CATURRA

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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: >1600m
5–15°N and 5–15°S: >1300m
>15°N and >15°S: >1000m

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

Good



COFFEE LEAF RUST

Susceptible



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Susceptible



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

Genetics

LINEAGE	Natural mutation of the Bourbon variety
GENETIC DESCRIPTION	Bourbon-Typica Group (Bourbon-related)

Availability

BREEDER	Instituto Agronômico (IAC), Brazil
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



JACKSON 2/1257 JACKSON

5

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

Appearance

STATURE

Tall



LEAF TIP COLOR

Bronze



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: >1200m

5–15°N and 5–15°S: >900m

>15°N and >15°S: >700m

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

High



COFFEE LEAF RUST

Susceptible



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Unknown

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

Genetics

LINEAGE	A selection of Jackson. Bourbon-like genetic background.
GENETIC DESCRIPTION	Bourbon-Typica Group (Bourbon-related)

Availability

BREEDER	Rwanda Agricultural Board (RAB)
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



K7

6

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

Appearance

STATURE

Tall



LEAF TIP COLOR

Light Bronze



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

High



COFFEE LEAF RUST

Tolerant



COFFEE BERRY DISEASE (CBD)

Tolerant



NEMATODES

Susceptible



YEAR OF FIRST PRODUCTION	Year Three
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Unknown
CHERRY-TO-GREEN-BEAN OUTTURN	High
PLANTING DENSITY	1000-2000 a/ha (using multiple-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.

Genetics

LINEAGE	Selected from French Mission. Bourbon-like genetic background.
GENETIC DESCRIPTION	Bourbon-Typica Group (Bourbon-related)

Availability

BREEDER	Individual farmer selection: R.H. Walker in Kenya in 1936
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



KP423

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

Appearance

STATURE

Tall



LEAF TIP COLOR

Light Bronze



BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: 1200–1600m
5–15°N and 5–15°S: 900–1300m
>15°N and >15°S: 700–1000m

QUALITY POTENTIAL AT HIGH ALTITUDE

Low



YIELD POTENTIAL

High



COFFEE LEAF RUST

Tolerant



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Susceptible



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

Genetics

LINEAGE	A selection of Kent. Likely Bourbon-like genetic background.
GENETIC DESCRIPTION	Bourbon-Typica Group (Bourbon-related)

Availability

BREEDER	Lyamungu Research Station, Tanzania
INTELLECTUAL PROPERTY RIGHTS	Registration in the International Union for the Protection of New Varieties of Plants (UPOV) is currently in process.



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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: >1600m
5–15°N and 5–15°S: >1300m
>15°N and >15°S: >1000m

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

Good



COFFEE LEAF RUST

Susceptible



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Susceptible



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

Genetics

LINEAGE	A natural mutation of Bourbon.
GENETIC DESCRIPTION	Bourbon-Typica Group (Bourbon-related)

Availability

BREEDER	Instituto Salvadoreño de Investigaciones del Café (ISIC)
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



SL28

9

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

Appearance

STATURE

Tall



LEAF TIP COLOR

Green



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Exceptional



YIELD POTENTIAL

Very High



COFFEE LEAF RUST

Susceptible



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Susceptible



YEAR OF FIRST PRODUCTION	Year Three
NUTRITION REQUIREMENT	Low
RIPENING OF FRUIT	Unknown
CHERRY-TO-GREEN-BEAN OUTTURN	High
PLANTING DENSITY	1000-2000 a/ha (using multiple-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.

Genetics

LINEAGE	Selection of "Tanganika Drought Resistant." Bourbon-like genetic background.
GENETIC DESCRIPTION	Bourbon-Typica Group (Bourbon-related)

Availability

BREEDER	Scott Agricultural Laboratories
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



TEKISIC IMPROVED BOURBON

10

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

Appearance

STATURE

Tall



LEAF TIP COLOR

Green



BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: >1600m

5–15°N and 5–15°S: >1300m

>15°N and >15°S: >1000m

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good



YIELD POTENTIAL

Medium



COFFEE LEAF RUST

Susceptible



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Susceptible



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

Genetics

LINEAGE	A selection of the Bourbon variety
GENETIC DESCRIPTION	Bourbon-Typica Group (Bourbon-related)

Availability

BREEDER	Instituto Salvadoreño de Investigaciones del Café (ISIC)
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



VENECIA

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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

Good



COFFEE LEAF RUST

Susceptible



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Susceptible



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

Genetics

LINEAGE	A natural mutation of Bourbon
GENETIC DESCRIPTION	Bourbon-Typica Group (Bourbon-related)

Availability

BREEDER	Instituto del Café de Costa Rica (ICAPE)
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



VILLA SARCHI

12

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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Below Average



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: >1600m

5–15°N and 5–15°S: >1300m

>15°N and >15°S: >1000m

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

Good



COFFEE LEAF RUST

Susceptible

COFFEE BERRY DISEASE (CBD)

Susceptible

NEMATODES

Susceptible

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

Genetics

LINEAGE	A natural mutation of Bourbon
GENETIC DESCRIPTION	Bourbon-Typica Group (Bourbon-related)

Availability

BREEDER	Instituto del Café de Costa Rica (ICAPE)
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



HARRAR RWANDA *HARAR OR HARRAGHE*

13

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).

Appearance

STATURE

Tall



LEAF TIP COLOR

Dark Bronze



BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good



YIELD POTENTIAL

High



COFFEE LEAF RUST

Susceptible

COFFEE BERRY DISEASE (CBD)

Susceptible

NEMATODES

Unknown

YEAR OF FIRST PRODUCTION	Year Two
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Average
PLANTING DENSITY	2000-3000 a/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.

Genetics

LINEAGE	Typica-like genetic background, introduced to Rwanda in 1956.
GENETIC DESCRIPTION	Bourbon-Typica Group (Typica-related)

Availability

BREEDER	Rwanda Agricultural Board (RAB)
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



MARAGOGIPE

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

Appearance

STATURE

Tall



LEAF TIP COLOR

Bronze



BEAN SIZE

Very Large



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good



YIELD POTENTIAL

Low



COFFEE LEAF RUST

Susceptible



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Susceptible



YEAR OF FIRST PRODUCTION	Year Four
NUTRITION REQUIREMENT	Low
RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Very High
PLANTING DENSITY	3000-4000 (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.

Genetics

LINEAGE	A natural mutation of Typica
GENETIC DESCRIPTION	Bourbon-Typica Group (Typica-related)

Availability

BREEDER	None
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



MIBIRIZI

15

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

Appearance

STATURE

Tall



LEAF TIP COLOR

Green or Bronze

BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: >1600m
5–15°N and 5–15°S: >1300m
>15°N and >15°S: >1000m

QUALITY POTENTIAL AT HIGH ALTITUDE

Exceptional



YIELD POTENTIAL

Good



COFFEE LEAF RUST

Susceptible



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Unknown

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

Genetics

LINEAGE	Likely Typica-like genetic background.
GENETIC DESCRIPTION	Bourbon-Typica Group (Typica-related)

Availability

BREEDER	None.
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



NYASALAND *BUGISU LOCAL, NYASA*

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

Appearance

STATURE

Tall



LEAF TIP COLOR

Light Bronze



BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

Good



COFFEE LEAF RUST

Susceptible



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Unknown

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

Genetics

LINEAGE	Likely Typica-like genetic background.
GENETIC DESCRIPTION	Bourbon-Typica Group (Typica-related)

Availability

BREEDER	None.
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Bronze



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: >1600m
5–15°N and 5–15°S: >1300m
>15°N and >15°S: >1000m

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

Medium



COFFEE LEAF RUST

Susceptible



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Susceptible



YEAR OF FIRST PRODUCTION	Year Four
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Average
PLANTING DENSITY	5000-6000 a/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

Genetics

LINEAGE	A natural mutation of Typica.
GENETIC DESCRIPTION	Bourbon-Typica Group (Typica-related)

Availability

BREEDER	None
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



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.

Appearance

STATURE

Tall



LEAF TIP COLOR

Bronze



BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

High



COFFEE LEAF RUST

Resistant



COFFEE BERRY DISEASE (CBD)

Tolerant



NEMATODES

Unknown

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

Genetics

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

Availability

BREEDER	Rwanda Agricultural Board (RAB)
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



SL14

19

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

Appearance

STATURE

Tall



LEAF TIP COLOR

Light Bronze



BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

High



COFFEE LEAF RUST

Susceptible



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Susceptible



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

Genetics

LINEAGE	Typica-like genetic background.
GENETIC DESCRIPTION	Bourbon-Typica Group (Typica-related)

Availability

BREEDER	Scott Agricultural Laboratories
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



SL34

20

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

Appearance

STATURE

Tall



LEAF TIP COLOR

Dark Bronze



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Exceptional



YIELD POTENTIAL

High



COFFEE LEAF RUST

Susceptible



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Susceptible



YEAR OF FIRST PRODUCTION	Year Three
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Unknown
CHERRY-TO-GREEN-BEAN OUTTURN	High
PLANTING DENSITY	1000-2000 a/ha (using multiple-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.

Genetics

LINEAGE	Typica-like genetic background.
GENETIC DESCRIPTION	Bourbon-Typica Group (Typica-related)

Availability

BREEDER	Scott Agricultural Laboratories
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



TYPICA

21

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.

Appearance

STATURE

Tall



LEAF TIP COLOR

Bronze



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: >1600m

5–15°N and 5–15°S: >1300m

>15°N and >15°S: >1000m

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good



YIELD POTENTIAL

Low



COFFEE LEAF RUST

Susceptible

COFFEE BERRY DISEASE (CBD)

Susceptible

NEMATODES

Susceptible

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

Genetics

LINEAGE	—
GENETIC DESCRIPTION	Bourbon-Typica Group (Typica-related)

Availability

BREEDER	None
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



CATUAI

22

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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: >1600m
5–15°N and 5–15°S: >1300m
>15°N and >15°S: >1000m

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

Good



COFFEE LEAF RUST

Susceptible

COFFEE BERRY DISEASE (CBD)

Susceptible

NEMATODES

Susceptible

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

Genetics

LINEAGE	Mundo Novo x Caturra
GENETIC DESCRIPTION	Bourbon-Typica Group (Typica- and Bourbon-related)

Availability

BREEDER	Instituto Agronômico (IAC), Brazil
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



MUNDO NOVO

23

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.

Appearance

STATURE

Tall



LEAF TIP COLOR

Green or Bronze

BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: >1600m

5–15°N and 5–15°S: >1300m

>15°N and >15°S: >1000m

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

High



COFFEE LEAF RUST

Susceptible

COFFEE BERRY DISEASE (CBD)

Susceptible

NEMATODES

Susceptible

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

Genetics

LINEAGE	Typica x Bourbon
GENETIC DESCRIPTION	Bourbon-Typica Group (Typica- and Bourbon-related)

Availability

BREEDER	Instituto Agronômico de Campinas (IAC), Brasil
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



PACAMARA

24

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.

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green or Bronze



BEAN SIZE

Very Large



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: >1600m
5–15°N and 5–15°S: >1300m
>15°N and >15°S: >1000m

QUALITY POTENTIAL AT HIGH ALTITUDE

Exceptional



YIELD POTENTIAL

Good



COFFEE LEAF RUST

Susceptible



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Susceptible




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

Genetics

LINEAGE	Pacas x Maragogype
GENETIC DESCRIPTION	Bourbon-Typica Group (Typica- and Bourbon-related)

Availability

BREEDER	Instituto Salvadoreño de Investigaciones del Café (ISIC)
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain
 This variety is available through the WCR Verified SM program.	



GEISHA (PANAMA)

25

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.

Appearance

STATURE

Tall



LEAF TIP COLOR

Green or Bronze

BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: >1600m
5–15°N and 5–15°S: >1300m
>15°N and >15°S: >1000m

QUALITY POTENTIAL AT HIGH ALTITUDE

Exceptional



YIELD POTENTIAL

Medium



COFFEE LEAF RUST

Tolerant



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Susceptible



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

Genetics

LINEAGE	—
GENETIC DESCRIPTION	Ethiopian Landrace

Availability

BREEDER	None
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



JAVA

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

Appearance

STATURE

Tall



LEAF TIP COLOR

Bronze



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good



YIELD POTENTIAL

Medium



COFFEE LEAF RUST

Tolerant



COFFEE BERRY DISEASE (CBD)

Tolerant



NEMATODES

Susceptible



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

Genetics

LINEAGE	—
GENETIC DESCRIPTION	Ethiopian Landrace

Availability

BREEDER	None
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



ANACAFE 14 *CATIMOR*

27

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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Very Large



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

High



COFFEE LEAF RUST

Resistant



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Susceptible



YEAR OF FIRST PRODUCTION	Year Two
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Late
CHERRY-TO-GREEN-BEAN OUTTURN	High
PLANTING DENSITY	4000-5000 a/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.

Genetics

LINEAGE	(Timor Hybrid 832/1 x Caturra) x Pacamara
GENETIC DESCRIPTION	Introgressed (Catimor)

Availability

BREEDER	National Coffee Association of Guatemala (ANACAFÉ)
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



CATIMOR 129 *CAT129, NYIKA*

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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

Very High



COFFEE LEAF RUST

Resistant



COFFEE BERRY DISEASE (CBD)

Resistant



NEMATODES

Susceptible



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

Genetics

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

Availability

BREEDER	Cenicafe
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



Adapted to warmest zones and acidic soils. High yielding.

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Bronze



BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Low



YIELD POTENTIAL

High



COFFEE LEAF RUST

Resistant



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Susceptible



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

Genetics

LINEAGE	Timor Hybrid 832/1 x Caturra
GENETIC DESCRIPTION	Introgressed (Catimor)

Availability

BREEDER	Instituto Salvadoreño de Investigaciones del Café (ISIC)
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



COSTA RICA 95 *CATIMOR*

30

High yielding variety adapted to warmest zones and acidic soils.

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Bronze



BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Low



YIELD POTENTIAL

High



COFFEE LEAF RUST

Susceptible



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Susceptible




YEAR OF FIRST PRODUCTION	Year Three
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Average
PLANTING DENSITY	5000-6000 a/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 maybe possibly 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.

Genetics

LINEAGE	Timor Hybrid 832/1 x Caturra
GENETIC DESCRIPTION	Introgressed (Catimor)

Availability

BREEDER	Instituto del Café de Costa Rica (ICAFFE)
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain
 This variety is available through the WCR Verified SM program. .	



FRONTON *CATIMOR*

31

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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green or Bronze



BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

Good



COFFEE LEAF RUST

Resistant



COFFEE BERRY DISEASE (CBD)

Unknown

NEMATODES

Unknown

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

Genetics

LINEAGE	Timor Hybrid x Caturra
GENETIC DESCRIPTION	Introgressed (Catimor)

Availability

BREEDER	None.
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



IHCAFE 90 *CATIMOR*

32

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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Dark Bronze



BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Low



YIELD POTENTIAL

High



COFFEE LEAF RUST

Susceptible



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Susceptible



YEAR OF FIRST PRODUCTION	Year Two
NUTRITION REQUIREMENT	Very High
RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Low
PLANTING DENSITY	4000-5000 a/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.

Genetics

LINEAGE	Timor Hybrid 832/1 x Caturra
GENETIC DESCRIPTION	Introgressed (Catimor)

Availability

BREEDER	Instituto Hondureño del Café (IHCAFE)
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



LEMPIRA *CATIMOR*

33

High yielding variety adapted to warmest zones and acidic soils.

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Bronze



BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Low



YIELD POTENTIAL

High



COFFEE LEAF RUST

Susceptible



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Susceptible



YEAR OF FIRST PRODUCTION	Year Three
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Low
PLANTING DENSITY	5000-6000 a/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.

Genetics

LINEAGE	Timor Hybrid 832/1 x Caturra
GENETIC DESCRIPTION	Introgressed (Catimor)

Availability

BREEDER	Instituto Hondureño del Café (IHCAFE)
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



Adapted to warmest zones and acidic soils. High yielding.

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

High



COFFEE LEAF RUST

Resistant



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Susceptible



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

Genetics

LINEAGE	Timor Hybrid 832/1 x Caturra
GENETIC DESCRIPTION	Introgressed (Catimor)

Availability

BREEDER	Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias (INIFAP), Mexico
INTELLECTUAL PROPERTY RIGHTS	This plant is registered in the International Union for the Protection of New Varieties of Plants (UPOV)



T5175 CATIMOR

35

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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Dark Bronze



BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Low



YIELD POTENTIAL

High



COFFEE LEAF RUST

Resistant



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Susceptible



YEAR OF FIRST PRODUCTION	Year Two
NUTRITION REQUIREMENT	Very High
RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Low
PLANTING DENSITY	4000-5000 a/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.

Genetics

LINEAGE	Timor Hybrid 832/1 x Caturra
GENETIC DESCRIPTION	Introgressed (Catimor)

Availability

BREEDER	Instituto del Café de Costa Rica (ICAPE)
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Bronze



BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Low



YIELD POTENTIAL

High



COFFEE LEAF RUST

Resistant



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Susceptible



YEAR OF FIRST PRODUCTION	Year Three
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Low
PLANTING DENSITY	5000-6000 a/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.

Genetics

LINEAGE	Hybrid of Timor 832/1 x Caturra
GENETIC DESCRIPTION	Introgressed (Catimor)

Availability

BREEDER	None
INTELLECTUAL PROPERTY RIGHTS	This plant is registered in the International Union for the Protection of New Varieties of Plants (UPOV)



CUSCATLECO *SARCHIMOR*

37

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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: 1000–1600m

5–15°N and 5–15°S: 700–1300m

>15°N and >15°S: 400–1000m

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

Good



COFFEE LEAF RUST

Resistant



COFFEE BERRY DISEASE (CBD)

Unknown

NEMATODES

Resistant



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

Genetics

LINEAGE	Selection of T5296
GENETIC DESCRIPTION	Introgressed (Sarchimor)

Availability

BREEDER	Fundación Salvadoreña para Investigaciones del Café (PROCAFÉ)
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



IAPAR 59 SARCHIMOR

38

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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Light Bronze



BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Low



YIELD POTENTIAL

Good



COFFEE LEAF RUST

Resistant



COFFEE BERRY DISEASE (CBD)

Susceptible



NEMATODES

Resistant



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

Genetics

LINEAGE	Timor Hybrid 832/2 x Villa Sarchi
GENETIC DESCRIPTION	Introgressed (Sarchimor)

Availability

BREEDER	Instituto Agronômico do Paraná (IAPAR), Brazil
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



LIMANI SARCHIMOR

39

An elusive Puerto Rican variety.

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Bronze



BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

Good



COFFEE LEAF RUST

Resistant



COFFEE BERRY DISEASE (CBD)

Unknown

NEMATODES

Unknown

YEAR OF FIRST PRODUCTION	Year Three
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	High
PLANTING DENSITY	5000-6000 a/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, resistance to coffee leaf rust. True Limani is supposed to be well adapted to medium altitudes (above 1000 m) and rust resistant.

Genetics

LINEAGE	Timor Hybrid 832/2 x Villa Sarchi
GENETIC DESCRIPTION	Introgressed (Sarchimor)

Availability

BREEDER	Unknown, in Puerto Rico
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



MARSELLESA *SARCHIMOR*

40

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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Average



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

High



COFFEE LEAF RUST

Resistant



COFFEE BERRY DISEASE (CBD)

Tolerant



NEMATODES

Susceptible




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

Genetics

LINEAGE	Timor Hybrid 832/2 x Villa Sarchi C1FC 971/10
GENETIC DESCRIPTION	Introgressed (Sarchimor)

Availability

BREEDER	CIRAD-ECOM
INTELLECTUAL PROPERTY RIGHTS	This plant is registered in the International Union for the Protection of New Varieties of Plants (UPOV)
 This variety is available through the WCR Verified SM program.	



OBATA ROJO *SARCHIMOR*

41

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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: 1000–1600m

5–15°N and 5–15°S: 700–1300m

>15°N and >15°S: 400–1000m

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

High



COFFEE LEAF RUST

Resistant



COFFEE BERRY DISEASE (CBD)

Unknown

NEMATODES


Unknown

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

Genetics

LINEAGE	Timor Hybrid 832/2 x Villa Sarchi CIFC 971/10
GENETIC DESCRIPTION	Introgressed (Sarchimor)

Availability

BREEDER	Instituto Agronômico (IAC), Brazil
INTELLECTUAL PROPERTY RIGHTS	This plant is registered in the International Union for the Protection of New Varieties of Plants (UPOV)
 This variety is available through the WCR Verified SM program.	



PARAINEMA SARCHIMOR

42

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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

Good



COFFEE LEAF RUST

Resistant



COFFEE BERRY DISEASE (CBD)

Tolerant



NEMATODES

Resistant



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

Genetics

LINEAGE	Selection of T5296
GENETIC DESCRIPTION	Introgressed (Sarchimor)

Availability

BREEDER	Instituto Hondureño del Café (IHCAFE)
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



T5296 SARCHIMOR

43

Well-adapted to medium altitudes. Variety not uniform.

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: 1000–1600m

5–15°N and 5–15°S: 700–1300m

>15°N and >15°S: 400–1000m

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

Good



COFFEE LEAF RUST

Resistant



COFFEE BERRY DISEASE (CBD)

Tolerant



NEMATODES

Unknown

YEAR OF FIRST PRODUCTION	Year Three
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	High
PLANTING DENSITY	5000-6000 a/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 spp.</i> There may be varying degrees of resistance to <i>Meloidogyne exigua</i> .

Genetics

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

Availability

BREEDER	—
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



BATIAN

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

Appearance

STATURE

Tall



LEAF TIP COLOR

Green or Bronze

BEAN SIZE

Very Large



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good



YIELD POTENTIAL

High



COFFEE LEAF RUST

Tolerant



COFFEE BERRY DISEASE (CBD)

Resistant



NEMATODES

Susceptible



YEAR OF FIRST PRODUCTION	Year Two
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Unknown
CHERRY-TO-GREEN-BEAN OUTTURN	High
PLANTING DENSITY	2000-3000 a/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).

Genetics

LINEAGE	Composite variety containing parentage from: SL28, SL34, Rume Sudan, N39, K7, SL4 and the Timor Hybrid.
GENETIC DESCRIPTION	Introgressed (Other)

Availability

BREEDER	Coffee Research Foundation (now Kenya Agricultural and Livestock Research Organization, KALRO)
INTELLECTUAL PROPERTY RIGHTS	This plant is registered in the International Union for the Protection of New Varieties of Plants (UPOV)



RAB C15

45

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

Appearance

STATURE

Tall



LEAF TIP COLOR

Green or Bronze

BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: >1200m

5–15°N and 5–15°S: >900m

>15°N and >15°S: >700m

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good



YIELD POTENTIAL

Very High



COFFEE LEAF RUST

Resistant



COFFEE BERRY DISEASE (CBD)

Resistant



NEMATODES

Unknown

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

Genetics

LINEAGE	A selection of the Indian variety Sln.6 (Kent x C. robusta). A population composite variety.
GENETIC DESCRIPTION	Introgressed (Other)

Availability

BREEDER	Rwanda Agricultural Board (RAB)
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain



CENTROAMERICANO H1

Very high yielding with very good quality potential. Well-adapted for agroforestry.

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good



YIELD POTENTIAL

Very High



COFFEE LEAF RUST

Resistant



COFFEE BERRY DISEASE (CBD)

Tolerant



NEMATODES

Susceptible



YEAR OF FIRST PRODUCTION	Year Two
NUTRITION REQUIREMENT	Very High
RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Very High
PLANTING DENSITY	3000-4000 (using single stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Requires careful nutrition for roots to become established, avoiding too much nitrogen (N). An important note about F1 hybrids: Seeds taken from hybrid plants <i>will not have the same characteristics as the parent plants</i> . 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.

Genetics

LINEAGE	T5296 x Rume Sudan
GENETIC DESCRIPTION	F1 Hybrid (Introgressed)

Availability

BREEDER	CIRAD-CATIE-ICAFFE-IHCAFE-PROCAFE-ANACAFE
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain in Costa Rica, El Salvador, Guatemala and Honduras; outside of these countries, permission should be requested from PROMECAFE.



This variety is available through the WCR VerifiedSM program.



Very high yielding variety at elevations at high altitudes.

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Light Bronze



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: >1600m
5–15°N and 5–15°S: >1300m
>15°N and >15°S: >1000m

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good



YIELD POTENTIAL

High



COFFEE LEAF RUST

Susceptible



COFFEE BERRY DISEASE (CBD)

Tolerant



NEMATODES

Susceptible



YEAR OF FIRST PRODUCTION	Year Two
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Very High
PLANTING DENSITY	4000-5000 a/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	May have difficulty establishing roots in the first two years. 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 <i>will not have the same characteristics as the parent plants</i> . 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.

Genetics

LINEAGE	Naryelis (Catimor) x Ethiopian landrace accession "ET06" (CATIE collection)
GENETIC DESCRIPTION	F1 Hybrid (Introgressed)

Availability

BREEDER	CIRAD-ECOM
INTELLECTUAL PROPERTY RIGHTS	Registration in the International Union for the Protection of New Varieties of Plants (UPOV) is currently in process.



MILENIO H10

48

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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good



YIELD POTENTIAL

Very High



COFFEE LEAF RUST

Resistant



COFFEE BERRY DISEASE (CBD)

Tolerant



NEMATODES

Susceptible



YEAR OF FIRST PRODUCTION	Year Two
NUTRITION REQUIREMENT	Unknown
RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Very High
PLANTING DENSITY	4000-5000 a/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	An important note about F1 hybrids: Seeds taken from hybrid plants <i>will not have the same characteristics as the parent plants</i> . 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.

Genetics

LINEAGE	T5296 x Rume Sudan
GENETIC DESCRIPTION	F1 Hybrid (Introgressed)

Availability

BREEDER	CIRAD-CATIE-ICAFFE-IHCAFE-PROCAFE-ANACAFE
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain in Costa Rica, El Salvador, Guatemala and Honduras; outside of these countries, permission should be requested from PROMECAFE.



MUNDO MAYA EC16

49

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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Bronze



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: >1200m

5–15°N and 5–15°S: >900m

>15°N and >15°S: >700m

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good



YIELD POTENTIAL

High



COFFEE LEAF RUST

Resistant



COFFEE BERRY DISEASE (CBD)

Tolerant



NEMATODES

Resistant



YEAR OF FIRST PRODUCTION	Year Two
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Very High
PLANTING DENSITY	4000-5000 a/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Nematodes: Variety not resistant to <i>Pratylenchus</i> spp. Is resistant to some <i>Meloidogyne</i> spp. An important note about F1 hybrids: Seeds taken from hybrid plants <i>will not have the same characteristics as the parent plants</i> . 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.

Genetics

LINEAGE	T5296 x wild Ethiopian accession "ET01" (CATIE collection)
GENETIC DESCRIPTION	F1 Hybrid (Introgressed)

Availability

BREEDER	CIRAD-ECOM
INTELLECTUAL PROPERTY RIGHTS	Registration in the International Union for the Protection of New Varieties of Plants (UPOV) is currently in process.



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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Dark Bronze



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: >1600m
 5–15°N and 5–15°S: >1300m
 >15°N and >15°S: >1000m

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good



YIELD POTENTIAL

High



COFFEE LEAF RUST

Susceptible



COFFEE BERRY DISEASE (CBD)

Tolerant



NEMATODES

Susceptible



YEAR OF FIRST PRODUCTION	Year Two
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Very High
PLANTING DENSITY	3000-4000 (using single stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	An important note about F1 hybrids: Seeds taken from hybrid plants <i>will not have the same characteristics as the parent plants</i> . 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.

Genetics

LINEAGE	Naryelis x wild Ethiopian accession "ET26" (CATIE collection)
GENETIC DESCRIPTION	F1 Hybrid (Introgressed)

Availability

BREEDER	CIRAD-ECOM
INTELLECTUAL PROPERTY RIGHTS	Registration in the International Union for the Protection of New Varieties of Plants (UPOV) is currently in process.



RUIRU 11

51

High yielding, dwarf hybrid tolerant to coffee leaf rust and resistant to coffee berry disease. Released in Kenya.

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green or Bronze

BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

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

QUALITY POTENTIAL AT HIGH ALTITUDE

Good



YIELD POTENTIAL

Very High



COFFEE LEAF RUST

Tolerant



COFFEE BERRY DISEASE (CBD)

Resistant



NEMATODES

Susceptible



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

Genetics

LINEAGE	Composite variety made of many varieties. Catimor (female parent) x multicross selection involving K7, SL28, N39, Rume Sudan, among others (male parent).
GENETIC DESCRIPTION	F1 Hybrid (Introgressed)

Availability

BREEDER	Coffee Research Foundation (now Kenya Agricultural and Livestock Research Organization, KALRO)
INTELLECTUAL PROPERTY RIGHTS	This plant is registered in the International Union for the Protection of New Varieties of Plants (UPOV)



STARMAYA

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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: 1200–1600m
5–15°N and 5–15°S: 900–1300m
>15°N and >15°S: 700–1000m

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good



YIELD POTENTIAL

High



COFFEE LEAF RUST

Resistant



COFFEE BERRY DISEASE (CBD)

Unknown

NEMATODES

Unknown

YEAR OF FIRST PRODUCTION	Year Two
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	High
PLANTING DENSITY	4000-5000 a/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).

Genetics

LINEAGE	Marsallea x wild Ethiopian/Sudanese natural mutant
GENETIC DESCRIPTION	F1 Hybrid (Introgressed)

Availability

BREEDER	CIRAD-ECOM
INTELLECTUAL PROPERTY RIGHTS	Registration in the International Union for the Protection of New Varieties of Plants (UPOV) is currently in process.



CASIOPEA

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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Bronze



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: >1600m

5–15°N and 5–15°S: >1300m

>15°N and >15°S: >1000m

QUALITY POTENTIAL AT HIGH ALTITUDE

Exceptional



YIELD POTENTIAL

High



COFFEE LEAF RUST

Susceptible

COFFEE BERRY DISEASE (CBD)

Susceptible

NEMATODES

Susceptible

YEAR OF FIRST PRODUCTION	Year Three
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Very High
PLANTING DENSITY	4000-5000 a/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	An important note about F1 hybrids: Seeds taken from hybrid plants <i>will not have the same characteristics as the parent plants</i> . 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.

Genetics

LINEAGE	Caturra x Ethiopian wild accession "ET41" (CATIE collection)
GENETIC DESCRIPTION	F1 Hybrid (Not Introgressed)

Availability

BREEDER	CIRAD-CATIE-ICAFFE-IHCAFFE-PROCAFFE-ANACAFE
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain in Costa Rica, El Salvador, Guatemala and Honduras; outside of these countries, permission should be requested from PROMECAFE.



H3

54

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

Appearance

STATURE

Dwarf/Compact



LEAF TIP COLOR

Green



BEAN SIZE

Large



Agronomics

OPTIMAL ALTITUDE

5°N to 5°S: >1600m
5–15°N and 5–15°S: >1300m
>15°N and >15°S: >1000m

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good



YIELD POTENTIAL

High



COFFEE LEAF RUST

Susceptible

COFFEE BERRY DISEASE (CBD)

Susceptible

NEMATODES

Susceptible

YEAR OF FIRST PRODUCTION	Year Three
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Very High
PLANTING DENSITY	3000-4000 (using single stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Stature is intermediate between dwarf and tall. An important note about F1 hybrids: Seeds taken from hybrid plants <i>will not have the same characteristics as the parent plants</i> . 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.

Genetics

LINEAGE	Caturra x Ethiopian landrace accession "E531" (CATIE collection)
GENETIC DESCRIPTION	F1 Hybrid (Not Introgressed)

Availability

BREEDER	CIRAD-CATIE-ICAFFE-IHCAFFE-PROCAFFE-ANACAFE
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain in Costa Rica, El Salvador, Guatemala and Honduras; outside of these countries, permission should be requested from PROMECAFE.



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. Grafting Arabica onto Robusta rootstock has no effect on cup quality.

Appearance

STATURE

Not Applicable



LEAF TIP COLOR

Not Applicable

BEAN SIZE

Not Applicable



Agronomics

OPTIMAL ALTITUDE

Unknown

QUALITY POTENTIAL AT HIGH ALTITUDE

Not Applicable



YIELD POTENTIAL

Not Applicable



COFFEE LEAF RUST

Not Applicable

COFFEE BERRY DISEASE (CBD)

Not Applicable

NEMATODES

Resistant



YEAR OF FIRST PRODUCTION	Not Applicable
NUTRITION REQUIREMENT	Not Applicable
RIPENING OF FRUIT	Not Applicable
CHERRY-TO-GREEN-BEAN OUTTURN	Not Applicable
PLANTING DENSITY	Not Applicable
ADDITIONAL AGRONOMIC INFORMATION	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> .

Genetics

LINEAGE	C. canephora T3561 x C. canephora T3751
GENETIC DESCRIPTION	Unknown

Availability

BREEDER	PROMECAFE-CIRAD-CATIE
INTELLECTUAL PROPERTY RIGHTS	This plant is in the public domain

