COFFEE VARIETIES

of Mesoamerica and the Caribbean

WORLD COFFEE RESEARCH

USAID
FROM THE AMERICAN PEOPLE

PROMECAFE
Por el Desarrollo de la Caficultura Regional

Date published: Mar 28, 2016
For most recent version of the data in this catalog, please visit:

> varieties.worldcoffeeresearch.org

World Coffee Research
5728 John Kimbrough Blvd., Suite 230
College Station, TX 77843-2477
www.worldcoffeeresearch.org

PARTNERS

Costa Rica
Centro de Investigaciones de Café de Costa Rica (ICAFÉ)

El Salvador
Fundación Salvadoreña para Investigaciones en Café (PROCAFÉ)
Consejo Salvadoreño de Cafe

Guatemala
Asociación Nacional del Café (ANACAFÉ)

Honduras
Instituto Hondureño del Café (IHCAFÉ)

Jamaica
Coffee Industry Board (CIB)

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

Nicaragua
El Instituto Nicaragüense de Tecnología Agropecuaria (INTA)

República Dominicana
Consejo Dominicano del Café (CODOCAFÉ)

Perú
Junta Nacional de Café (JNC)

ABOUT THE CATALOG

Information is power. This catalog brings urgently needed information to coffee farmers to help them decide which coffee is best for their situation. Coffee producers who make good planting decisions are at much less risk from disease or pests. Choosing the right type of coffee also has consequences for quality in the cup. Planting coffee that is well-adapted to the local environment is one critical factor in ensuring the highest possible quality.

The coffee leaf rust crisis of 2012 affected nearly 600,000 thousand acres of Central American coffee farmland. Nearly 300,000 coffee farmers need 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.

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. The lack of a comprehensive, up-to-date coffee catalog puts farmers at risk.

World Coffee Research, with support from USAID and PROMECAFE, has created this catalog of *Coffea arabica* coffees for Central America, Mexico, Peru, the Dominican Republic, and Jamaica. The catalog gathers in one place the essential information on 33 major cultivars in the region.

This catalog was developed in consultation with coffee experts from across Central America. It is the result of visits to each of the eight PROMECAFE countries and the interviews of nearly 120 people from some 70 private and public bodies involved in their national or regional coffee sectors.

Major funding for this project was provided by USAID.

Special thanks to the following reviewers:

- Noel Arrieta, Coordinador de Mejoramiento genético de café, CICAFE
- Francisco Anzueto, Asesor de la Dirección General, ANACAFÉ
- Fabian Echeverria Beirute, Texas A&M University
- Gusland McCook, Gerente Técnico del Coffee Industry Board, CIB
- Susana Schuller Petzold, Coordinadora del área de desarrollo técnico productivo, JNC
- Dulce Obin, Asistente Técnico de Operaciones Administrativas, PROMECAFE
- José Arnold Pineda, Investigador de mejoramiento genético, IHCAFE
- Oscar Ramos. Gerente Técnico, PROCAFÉ
- Carlos Mario Rodríguez, Director Global de Agronomía, Starbucks
- Alfredo Zamarripa, RD2 Vision

Photo credits: David Laughlin, Thompson Owen, Christophe Montagnon, Benoit Bertrand.

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'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 use Caturra, a common variety across Central America, as a reference. If a farmer knows how Caturra 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

Quality Potential at High Altitude (>1200m)

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, as compared with Caturra?
Low, Medium, Caturra-like, High, Very high

Stature

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

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 of coffee leaf rust. During the Central American leaf rust outbreak of 2012, the disease began showing up at higher altitudes than had previously been observed. Suggested altitudes for most leaf-rust-susceptible varieties have therefore been revised higher.

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 cause defoliation and may result in severe crop losses.*

CBD *(Coffee Berry Disease)*

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 kahawe*. Currently, CBD is not present in Central America. However, it is included here because it will be important for farmers to have should the disease spread to the region.*

Nematodes *(Meloidogyne spp. or Pratylenchus spp.)*

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

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

Bean Size

How big are the coffee beans, as compared with Caturra?
Small, Average (=Caturra), Large, Very Large

Leaf Tip Color

What color are the tips of new leaves?
Green, Light Bronze, Bronze, Dark Bronze, Green or Bronze

Year of First Production
When will the tree produce its first fruit, as compared with Caturra?
Early, Average (=Caturra), Late

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, as compared with Caturra?
Early, Average (=Caturra), Late, Very late

Cherry to Green Bean Ratio *(Outturn)*
What is the size of the bean in relation to the fruit, as compared with Caturra?
Low, Average (=Caturra), High, Very High

Planting Density
What spacing should you use for planting this variety?
Bourbon-like (3000-4000 a/ha), F1 hybrid-like (4000-5000 a/ha), Caturra-like (5000-6000 a/ha)

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

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

Genetic Group
Traditional American (descendant from Typica or Bourbon), Ethiopian landrace, Introgressed (Catimor/Sarchimor), F1 hybrid

Parentage
What are the parents of this variety (when known)?

ABOUT COFFEE VARIETIES

C. 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 by far the dominant species in Central America, 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 homogenous.** 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, 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 the region, but it's important to know they lack uniformity and stability and therefore do not meet the definition of variety laid out here.

Main Types

Traditional American

These are varieties that originate from Typica or Bourbon parentage (Typica and Bourbon are two distinct varieties within the Arabica species). *Coffea arabica* is native of Ethiopia, where the major genetic diversity of the species is found. In the 15th and 16th century, coffee trees were introduced from Ethiopia to Yemen. Then, in the early 18th century, a few seeds or trees were introduced from Yemen to Java, which gave rise to the “Typica” lineage (also called Arabigo or Indio). Typica plants reached the Caribbean and then spread across the American continent 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. They are associated with standard or high cup quality, but are susceptible to the major coffee diseases.

Ethiopian Landrace

These are varieties that evolved in the forests of Ethiopia, where *C. arabica* originated, through a process of human-led domestication. They are generally associated with very high cup quality, but are susceptible to the major coffee diseases.

Introgressed (Catimor/Sarchimor)

Introgressed varieties are those that possess some genetic traits from another species—in this case, *C. canephora* or Robusta. (“Introgressed” means “brought over.”) In the 1920s, a *C. arabica* and a *C. robusta* 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 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. Many of those 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 in the region for whom coffee leaf rust is a major threat.

F1 Hybrid

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

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

OBTAINING THE RIGHT PLANTS

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. A plant that isn't healthy is not a good plant. Some plants can look healthy at a young age, but have hidden problems, like bent roots, that prevent the buyer from achieving economic success with it.

The WCR Verified Program: How it Works

In order to ensure that producers have access to genetically pure, disease-free, vigorous seeds and plants that conform to the variety standard, WCR began a program of seed and nursery verification in 2016. Through the program, WCR verifies the health and genetic purity of seed lots at participating nurseries. World Coffee Research Verified nurseries are evaluated on the following criteria:

- Good nursery practices are followed to ensure healthy plants
- Nursery is aware of the different agronomic performance of different coffees and this information is made available to farmers, e.g., through a coffee catalog like this one, so that they can make informed choices
- Verified seedlings or seeds are genetically pure and conform to the variety standard as checked through WCR's DNA fingerprinting technology
- Breeders (if there are any) of the coffee can be named and their rights (if any) are respected

Become a Verified Nursery

If you operate a nursery and would like to sell WCR Verified planting material, please contact us at info@worldcoffeeresearch.org.

Where to Get Verified Varieties

For up-to-date information on whether it's possible to obtain a variety through the World Coffee Research Verified program, please visit our website: varieties.worldcoffeeresearch.org.

World Coffee Research Verified

Ensuring healthy, genetically pure plants

A World Coffee Research Verified coffee plant is healthy and genetically pure. The Verified program helps coffee farmers make informed decisions about which plants are best for them, so they can lower their risk and grow a healthy and sustainable crop. Verified plants can only be sold at nurseries that follow the four pillars of our program.

Nursery Standards

The nursery follows best practices for raising healthy, disease-free plants.

Genetic Purity

The coffee variety has been identified using World Coffee Resources DNA fingerprinting so farmers can be certain they are buying the correct variety.

Education

The nursery makes information about the agronomic performance of different varieties available to farmers so they can make an informed choice.

Breeder's Rights

The nursery gives credit to breeders and their rights are respected.

For more information contact **info@worldcoffeeresearch.org**

CHOOSING THE RIGHT VARIETY BASED ON ALTITUDE

600-800m	800-1000m	1000-1200m	1200-1300m	1300-1500m	>1500m
T5175, IHCAFE 90					
T5296					
	Costa Rica 95, Catisic, Lempira, Obata, Marsellesa, Cuscatleco, Parainema, IAPAR 59, Limani, Oro Azteca				
	Centroamericano, Milenio, Mundo Maya				
	Venecia				
			Java, Geisha, H3, Casiopea, Evaluna, Nayarita		
				Bourbon, Tekisic, Caturra, Villa Sarchí, Pacas, Pacamara, Típica, Catuaí, Magarogipe	

CHOOSING THE RIGHT VARIETY BASED ON AGRONOMIC PERFORMANCE

	Tall variety	Dwarf variety
Highest quality potential Very good or exceptional or above if grown at 1200 meters or above	Bourbon Tekisic Typica Java Geisha Maragogipe	Pacamara Centroamericano Milenio Mundo Maya H3 Casiopea Evaluna Nayarita
Highest yielding potential High or very high		Obata Marsallesa Catisic Costa Rica 95 Lempira Oro Azteca T5175 IHCAFE 90 Casiopea Centroamericano Evaluna H3 Millenio Mundo Maya Nayarita
Resistant to coffee leaf rust		Oro Azteca CR 95 Catisic Lempira T5175 IHCAFE 90 Obata T5296 Marsellesa Cuscatleco Parainema IAPAR 59 Limani Centroamericano Milenio Mundo Maya
Tolerant to CBD	Java	Marsellesa Cuscatleco Parainema Centroamericano Milenio Mundo Maya
Resistant to nematodes Nemaya rootstock is highly resistant to nematodes. Any variety can be grafted onto Nemaya.		Cuscatleco Parainema IAPAR 59
Good for smallholder farmers Low nutrition requirement	Java Magarogipe	

TABLE OF CONTENTS

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.

QUALITY POTENTIAL AT HIGH ALTITUDES
Very Good

YIELD POTENTIAL
Medium

STATURE
Tall

OPTIMAL ALTITUDE
>1300 meters

COFFEE LEAF RUST
Susceptible

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Susceptible

YEAR OF FIRST PRODUCTION
Late

NUTRITION REQUIREMENT
Medium

BEAN SIZE
Average

LEAF TIP COLOR
Green

RIPENING OF FRUIT	Early
CHERRY-TO-GREEN-BEAN OUTTURN	Average
PLANTING DENSITY	3000-4000 a/ha
ADDITIONAL AGRONOMIC INFORMATION	

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	None
GENETIC DESCRIPTION	Americana Tradicional/Borbón-relacionada
PARENTAGE	

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/bourbon

UPDATED
Jun 09, 2016

CATURRA

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Good

YIELD POTENTIAL
Caturra-like

STATURE
Dwarf

OPTIMAL ALTITUDE
>1300 meters

COFFEE LEAF RUST
Susceptible

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Susceptible

YEAR OF FIRST PRODUCTION
Average

NUTRITION REQUIREMENT
High

BEAN SIZE
Average

LEAF TIP COLOR
Green

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Average
PLANTING DENSITY	5000-6000 a/ha
ADDITIONAL AGRONOMIC INFORMATION	

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	Instituto Agronômico (IAC), Brazil
GENETIC DESCRIPTION	Traditional American/Bourbon-related
PARENTAGE	Natual mutation of the Bourbon variety

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/caturra

UPDATED
Jun 07, 2016

PACAS

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Good

YIELD POTENTIAL
Caturra-like

STATURE
Dwarf

OPTIMAL ALTITUDE
>1300 meters

COFFEE LEAF RUST
Susceptible

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Susceptible

YEAR OF FIRST PRODUCTION
Average

NUTRITION REQUIREMENT
Medium

BEAN SIZE
Average

LEAF TIP COLOR
Green

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Average
PLANTING DENSITY	Caturra-like (5000-6000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	Instituto Salvadoreño de Investigaciones del Café (ISIC)
GENETIC DESCRIPTION	Traditional American/Bourbon-related
PARENTAGE	A natural mutation of Bourbon.

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/pacas

UPDATED
Jun 07, 2016

TEKISIC *IMPROVED BOURBON*

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Very Good

YIELD POTENTIAL
Medium

STATURE
Tall

OPTIMAL ALTITUDE
>1300 meters

COFFEE LEAF RUST
Susceptible

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Susceptible

YEAR OF FIRST PRODUCTION
Late

NUTRITION REQUIREMENT
Medium

BEAN SIZE
Average

LEAF TIP COLOR
Green

RIPENING OF FRUIT	Early
CHERRY-TO-GREEN-BEAN OUTTURN	Average
PLANTING DENSITY	Bourbon-like (3000-4000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	Instituto Salvadoreño de Investigaciones del Café (ISIC)
GENETIC DESCRIPTION	Traditional American/Bourbon-related
PARENTAGE	A selection of the Bourbon variety

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/tekisic

UPDATED
Jun 07, 2016

VENECIA

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Good

YIELD POTENTIAL
Caturra-like

STATURE
Dwarf

OPTIMAL ALTITUDE
>800 meters

COFFEE LEAF RUST
Susceptible

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Susceptible

YEAR OF FIRST PRODUCTION
Average

NUTRITION REQUIREMENT
High

BEAN SIZE
Large

LEAF TIP COLOR
Green

RIPENING OF FRUIT	Late
CHERRY-TO-GREEN-BEAN OUTTURN	Average
PLANTING DENSITY	Caturra-like (5000-6000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	Instituto del Café de Costa Rica (ICAFE)
GENETIC DESCRIPTION	Traditional American/Bourbon-related
PARENTAGE	A natural mutation of Bourbon

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/venecia

UPDATED
Jun 06, 2016

VILLA SARCHI

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Good

YIELD POTENTIAL
Caturra-like

STATURE
Dwarf

OPTIMAL ALTITUDE
>1300 meters

COFFEE LEAF RUST
Susceptible

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Susceptible

YEAR OF FIRST PRODUCTION
Average

NUTRITION REQUIREMENT
High

BEAN SIZE
Small

LEAF TIP COLOR
Green

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Average
PLANTING DENSITY	Caturra-like (5000-6000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	Well-adpated to highest altitude conditions and tolerant of strong winds.

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	Instituto del Café de Costa Rica (ICAFE)
GENETIC DESCRIPTION	Traditional American/Bourbon-related
PARENTAGE	A natural mutation of Bourbon

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/villa-sarchi

UPDATED
Jun 07, 2016

CATUAI

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Good

YIELD POTENTIAL
Caturra-like

STATURE
Dwarf

OPTIMAL ALTITUDE
>1300 meters

COFFEE LEAF RUST
Susceptible

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Susceptible

YEAR OF FIRST PRODUCTION
Average

NUTRITION REQUIREMENT
High

BEAN SIZE
Average

LEAF TIP COLOR
Green

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Average
PLANTING DENSITY	Caturra-like (5000-6000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	Instituto Agronômico (IAC), Brazil
GENETIC DESCRIPTION	Traditional American/Typica and Bourbon-related
PARENTAGE	Mundo Novo x Caturra

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/catuai

UPDATED
Jun 07, 2016

PACAMARA

Standard quality in Central America. Very high susceptibility to coffee leaf rust. Variety not homogenous; plants are not stable from one generation to the next.

QUALITY POTENTIAL AT HIGH ALTITUDES
Very Good

YIELD POTENTIAL
Caturra-like

STATURE
Dwarf

OPTIMAL ALTITUDE
>1300 meters

COFFEE LEAF RUST
Susceptible

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Susceptible

YEAR OF FIRST PRODUCTION
Average

NUTRITION REQUIREMENT
Medium

BEAN SIZE
Very Large

LEAF TIP COLOR
Green or Bronze

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Average
PLANTING DENSITY	Caturra-like (5000-6000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	Instituto Salvadoreño de Investigaciones del Café (ISIC)
GENETIC DESCRIPTION	Traditional American (Bourbon and Typica-related)
PARENTAGE	Pacas x Maragogype

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/pacamara

UPDATED
Jun 07, 2016

MARAGOGIPE

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Very Good

YIELD POTENTIAL
Low

STATURE
Tall

OPTIMAL ALTITUDE
>1300 meters

COFFEE LEAF RUST
Susceptible

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Susceptible

YEAR OF FIRST PRODUCTION
Late

NUTRITION REQUIREMENT
Low

BEAN SIZE
Very Large

LEAF TIP COLOR
Bronze

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Very High
PLANTING DENSITY	Bourbon-like (3000-4000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	Due to the low productivity of Maragogipe, Pacamara is considered a better option.

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	None.
GENETIC DESCRIPTION	Traditional American/Typica-related
PARENTAGE	A natural mutation of Typica

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/magarogipe

UPDATED
Jun 06, 2016

TYPICA

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Very Good

YIELD POTENTIAL
Low

STATURE
Tall

OPTIMAL ALTITUDE
>1300 meters

COFFEE LEAF RUST
Susceptible

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Susceptible

YEAR OF FIRST PRODUCTION
Late

NUTRITION REQUIREMENT
Medium

BEAN SIZE
Large

LEAF TIP COLOR
Bronze

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Average
PLANTING DENSITY	Bourbon-like (3000-4000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	None
GENETIC DESCRIPTION	Traditional American/Typica-related
PARENTAGE	

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/typica

UPDATED
Jun 07, 2016

GEISHA (PANAMA)

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.

QUALITY POTENTIAL AT HIGH ALTITUDES
Exceptional

YIELD POTENTIAL
Medium

STATURE
Tall

OPTIMAL ALTITUDE
>1200 meters

COFFEE LEAF RUST
Tolerant

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Susceptible

YEAR OF FIRST PRODUCTION
Late

NUTRITION REQUIREMENT
Medium

BEAN SIZE
Average

LEAF TIP COLOR
Green

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Average
PLANTING DENSITY	Bourbon-like (3000-4000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	None
GENETIC DESCRIPTION	Ethiopian landrace
PARENTAGE	

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/geisha

UPDATED
Jun 07, 2016

JAVA

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Very Good

YIELD POTENTIAL
Medium

STATURE
Tall

OPTIMAL ALTITUDE
>1200 meters

COFFEE LEAF RUST
Tolerant

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Tolerant

YEAR OF FIRST PRODUCTION
Average

NUTRITION REQUIREMENT
Low

BEAN SIZE
Large

LEAF TIP COLOR
Bronze

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Average
PLANTING DENSITY	Bourbon-like (3000-4000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	None
GENETIC DESCRIPTION	Ethiopian landrace
PARENTAGE	

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/java

UPDATED
Jun 07, 2016

CATISIC *CATIMOR*

Adapted to warmest zones and acidic soils. High yielding.

QUALITY POTENTIAL AT HIGH ALTITUDES
Very Low

YIELD POTENTIAL
High

STATURE
Dwarf

OPTIMAL ALTITUDE
600–1200 meters

COFFEE LEAF RUST
Resistant

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Susceptible

YEAR OF FIRST PRODUCTION
Average

NUTRITION REQUIREMENT
High

BEAN SIZE
Average

LEAF TIP COLOR
Bronze

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Low
PLANTING DENSITY	Caturra-like (5000-6000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	Susceptible to Ojo de Gallo. Adapted to warmest zones and acidic soils.

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	Instituto Salvadoreño de Investigaciones del Café (ISIC)
GENETIC DESCRIPTION	Introgressed (Catimor)
PARENTAGE	Timor Hybrid 832/1 x Caturra

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/catisic

UPDATED
Jun 01, 2016

COSTA RICA 95 *CATIMOR*

High yielding variety adapted to warmest zones and acidic soils.

QUALITY POTENTIAL AT HIGH ALTITUDES
Low

YIELD POTENTIAL
High

STATURE
Dwarf

OPTIMAL ALTITUDE
600–1200 meters

COFFEE LEAF RUST
Resistant

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Susceptible

YEAR OF FIRST PRODUCTION
Average

NUTRITION REQUIREMENT
High

BEAN SIZE
Average

LEAF TIP COLOR
Bronze

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Average
PLANTING DENSITY	Caturra-like (5000-6000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	Susceptible to Ojo de Gallo. Recommended for acidic soils and soils rich in aluminum. Recommended for warmest zones.

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	Instituto del Café de Costa Rica (ICAFE)
GENETIC DESCRIPTION	Introgressed (Catimor)
PARENTAGE	Timor Hybrid 832/1 x Caturra

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/costa-rica-95

UPDATED
Jun 06, 2016

IHCAFE 90 *CATIMOR*

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Very Low

YIELD POTENTIAL
High

STATURE
Dwarf

OPTIMAL ALTITUDE
600–1000 meters

COFFEE LEAF RUST
Resistant

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Susceptible

YEAR OF FIRST PRODUCTION
Early

NUTRITION REQUIREMENT
Very High

BEAN SIZE
Average

LEAF TIP COLOR
Dark Bronze

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Low
PLANTING DENSITY	F1 hybrid-like (4000-5000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	Highly susceptible to Ojo de Gallo

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	Instituto Hondureño del Café (IHCAFE)
GENETIC DESCRIPTION	Introgressed (Catimor)
PARENTAGE	Timor Hybrid 832/1 x Caturra

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/ihcafe-90

UPDATED
Jun 09, 2016

LEMPIRA *CATIMOR*

High yielding variety adapted to warmest zones and acidic soils.

QUALITY POTENTIAL AT HIGH ALTITUDES
Low

YIELD POTENTIAL
High

STATURE
Dwarf

OPTIMAL ALTITUDE
600–1200 meters

COFFEE LEAF RUST
Resistant

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Susceptible

YEAR OF FIRST PRODUCTION
Average

NUTRITION REQUIREMENT
High

BEAN SIZE
Average

LEAF TIP COLOR
Bronze

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Low
PLANTING DENSITY	Caturra-like (5000-6000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	Susceptible to Ojo de Gallo. Recommended for acidic soils and soils rich aluminium. Recommended for warmest zones.

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	Instituto Hondureño del Café (IHCAFE)
GENETIC DESCRIPTION	Introgressed (Catimor)
PARENTAGE	Timor Hybrid 832/1 x Caturra

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/lempira

UPDATED
Jun 09, 2016

ORO AZTECA *CATIMOR*

Adapted to warmest zones and acidic soils. High yielding.

QUALITY POTENTIAL AT HIGH ALTITUDES
Good

YIELD POTENTIAL
High

STATURE
Dwarf

OPTIMAL ALTITUDE
600–1200 meters

COFFEE LEAF RUST
Resistant

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Susceptible

YEAR OF FIRST PRODUCTION
Average

NUTRITION REQUIREMENT
High

BEAN SIZE
Average

LEAF TIP COLOR
Green

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Average
PLANTING DENSITY	Caturra-like (5000-6000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	Susceptible to Ojo de Gallo. Recommended for acidic soils, soils rich in aluminium, and for warmest zones.

INTELLECTUAL PROPERTY RIGHTS	Registered in the International Union for the Protection of New Varieties of Plants (UPOV)
BREEDER	Instituto Nacional de Investigaciones Forestales, Agrícolas y Pecuarias (INIFAP), Mexico
GENETIC DESCRIPTION	Introgressed (Catimor)
PARENTAGE	Timor Hybrid 832/1 x Caturra

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/oro-azteca

UPDATED
Jun 07, 2016

T5175 *CATIMOR*

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Very Low

YIELD POTENTIAL
High

STATURE
Dwarf

OPTIMAL ALTITUDE
600–1000 meters

COFFEE LEAF RUST
Resistant

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Susceptible

YEAR OF FIRST PRODUCTION
Early

NUTRITION REQUIREMENT
Very High

BEAN SIZE
Average

LEAF TIP COLOR
Dark Bronze

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Low
PLANTING DENSITY	F1 hybrid-like (4000-5000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	Highly susceptible to Ojo de Gallo. T5175 is not homogeneous; plants are not stable from one generation to the next.

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	Instituto del Café de Costa Rica (ICAFE)
GENETIC DESCRIPTION	Introgressed (Catimor)
PARENTAGE	Timor Hybrid 832/1 x Caturra

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/t5175

UPDATED
Jun 06, 2016

CUSCATLECO *SARCHIMOR*

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Good

YIELD POTENTIAL
Caturra-like

STATURE
Dwarf

OPTIMAL ALTITUDE
600–1200 meters

COFFEE LEAF RUST
Resistant

NEMATODES
Resistant

COFFEE BERRY DISEASE (CBD)
Unknown

YEAR OF FIRST PRODUCTION
Average

NUTRITION REQUIREMENT
High

BEAN SIZE
Large

LEAF TIP COLOR
Green

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	High
PLANTING DENSITY	Caturra-like (5000-6000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	Nematode resistance: Not resistant to *Pratylenchus spp.* It is resistant to *Meloidogyne exigua.*

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	Fundación Salvadoreña para Investigaciones del Café (PROCAFÉ)
GENETIC DESCRIPTION	Introgressed (Sarchimor)
PARENTAGE	Selection of T5296

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/cuscatleco

UPDATED
Jun 06, 2016

IAPAR 59 *SARCHIMOR*

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Low

YIELD POTENTIAL
Caturra-like

STATURE
Dwarf

OPTIMAL ALTITUDE
800–1200 meters

COFFEE LEAF RUST
Resistant

NEMATODES
Resistant

COFFEE BERRY DISEASE (CBD)
Susceptible

YEAR OF FIRST PRODUCTION
Average

NUTRITION REQUIREMENT
High

BEAN SIZE
Average

LEAF TIP COLOR
Light Bronze

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	High
PLANTING DENSITY	Caturra-like (5000-6000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	Nematodes: Not resistant to *Pratylenchus spp.* It is resistant to *Meloidogyne exigua.*

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	Instituto Agronômico do Paraná (IAPAR), Brazil
GENETIC DESCRIPTION	Introgressed (Sarchimor)
PARENTAGE	Timor Hybrid 832/2 x Villa Sarchi

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/iapar-59

UPDATED
Jun 06, 2016

LIMANI *SARCHIMOR*

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Good

YIELD POTENTIAL
Caturra-like

STATURE
Dwarf

OPTIMAL ALTITUDE
600–1200 meters

COFFEE LEAF RUST
Resistant

NEMATODES
Unknown

COFFEE BERRY DISEASE (CBD)
Unknown

YEAR OF FIRST PRODUCTION
Average

NUTRITION REQUIREMENT
High

BEAN SIZE
Average

LEAF TIP COLOR
Unknown

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	High
PLANTING DENSITY	Caturra-like (5000-6000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	Unknown, in Puerto Rico
GENETIC DESCRIPTION	Introgressed (Sarchimor)
PARENTAGE	Timor Hybrid 832/2 x Villa Sarchi

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/limani

UPDATED
Jun 06, 2016

MARSELLESA *SARCHIMOR*

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Good

YIELD POTENTIAL
High

STATURE
Dwarf

OPTIMAL ALTITUDE
600–1200 meters

COFFEE LEAF RUST
Resistant

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Tolerant

YEAR OF FIRST PRODUCTION
Average

NUTRITION REQUIREMENT
High

BEAN SIZE
Average

LEAF TIP COLOR
Green

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	High
PLANTING DENSITY	Caturra-like (5000-6000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	

INTELLECTUAL PROPERTY RIGHTS	Registered in the International Union for the Protection of New Varieties of Plants (UPOV)
BREEDER	CIRAD-ECOM
GENETIC DESCRIPTION	Introgressed (Sarchimor)
PARENTAGE	Timor Hybrid 832/2 x Villa Sarchi CIFC 971/10

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/marsellesa

UPDATED
Jun 07, 2016

OBATA ROJO *SARCHIMOR*

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Good

YIELD POTENTIAL
High

STATURE
Dwarf

OPTIMAL ALTITUDE
600–1200 meters

COFFEE LEAF RUST
Resistant

NEMATODES
Unknown

COFFEE BERRY DISEASE (CBD)
Unknown

YEAR OF FIRST PRODUCTION
Average

NUTRITION REQUIREMENT
High

BEAN SIZE
Large

LEAF TIP COLOR
Green

RIPENING OF FRUIT	Late
CHERRY-TO-GREEN-BEAN OUTTURN	Unknown
PLANTING DENSITY	Caturra-like (5000-6000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	

INTELLECTUAL PROPERTY RIGHTS	Registered in the International Union for the Protection of New Varieties of Plants (UPOV)
BREEDER	Instituto Agronômico (IAC), Brazil
GENETIC DESCRIPTION	Introgressed (Sarchimor)
PARENTAGE	Timor Hybrid 832/2 x Villa Sarchi CIFC 971/10

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/obata-rojo

UPDATED
Jun 01, 2016

PARAINEMA *SARCHIMOR*

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Good

YIELD POTENTIAL
Caturra-like

STATURE
Dwarf

OPTIMAL ALTITUDE
600–1200 meters

COFFEE LEAF RUST
Resistant

NEMATODES
Resistant

COFFEE BERRY DISEASE (CBD)
Tolerant

YEAR OF FIRST PRODUCTION
Average

NUTRITION REQUIREMENT
High

BEAN SIZE
Large

LEAF TIP COLOR
Green

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	High
PLANTING DENSITY	Caturra-like (5000-6000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	Nematodes: Not resistant to *Pratylenchus spp.* Is resistant to *Meloidogyne exigua*.

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	Instituto Hondureño del Café (IHCAFE)
GENETIC DESCRIPTION	Introgressed (Sarchimor)
PARENTAGE	Selection of T5296

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/parainema

UPDATED
Jun 09, 2016

T5296 *SARCHIMOR*

Well-adapted to medium altitudes. Variety not homogenous.

QUALITY POTENTIAL AT HIGH ALTITUDES
Good

YIELD POTENTIAL
Caturra-like

STATURE
Dwarf

OPTIMAL ALTITUDE
600–1200 meters

COFFEE LEAF RUST
Resistant

NEMATODES
Resistant

COFFEE BERRY DISEASE (CBD)
Tolerant

YEAR OF FIRST PRODUCTION
Average

NUTRITION REQUIREMENT
High

BEAN SIZE
Large

LEAF TIP COLOR
Green

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	High
PLANTING DENSITY	Caturra-like (5000-6000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	T5296 not homogeneous; plants are not stable from one generation to the next. Farmers are better off using Parainema or Cucastleco. Nematodes: Not resistant to *Pratylenchus spp.* Is resistant of *Meloidogyne exigua.*

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	
GENETIC DESCRIPTION	Introgressed (Sarchimor)
PARENTAGE	Timor Hybrid CIFC 832/2 x Villa Sarchi

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/t5296

UPDATED
Jun 07, 2016

CASIOPEA

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Exceptional

YIELD POTENTIAL
High

STATURE
Dwarf

OPTIMAL ALTITUDE
>1200 meters

COFFEE LEAF RUST
Susceptible

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Susceptible

YEAR OF FIRST PRODUCTION
Average

NUTRITION REQUIREMENT
High

BEAN SIZE
Large

LEAF TIP COLOR
Green

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Very High
PLANTING DENSITY	F1 hybrid-like (4000-5000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	Seeds taken from hybrid plants *will not have the same characteristics as the parent plants.* This is called "segregation." It means that the child plant will not look or behave the same as the parent, with potential losses of yield, disease resistance, quality, or other agronomic performance traits. The variety should only be reproduced through clonal propagation.

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.
BREEDER	CIRAD-CATIE-ICAFE-IHCAFE-PROCAFE-ANACAFE
GENETIC DESCRIPTION	Hybrid (Ethiopian x Traditional American)
PARENTAGE	Caturra x Ethiopian wild accession "ET41" (CATIE collection)

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/casiopea

UPDATED
Jun 06, 2016

H3

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Very Good

YIELD POTENTIAL
High

STATURE
Dwarf

OPTIMAL ALTITUDE
>1200 meters

COFFEE LEAF RUST
Susceptible

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Susceptible

YEAR OF FIRST PRODUCTION
Average

NUTRITION REQUIREMENT
High

BEAN SIZE
Large

LEAF TIP COLOR
Green

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Very High
PLANTING DENSITY	Bourbon-like (3000-4000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	Stature is intermediate between dwarf and tall. Seeds taken from hybrid plants will *not have the same characteristics as the parent plants.* This is called “segregation.” It means that the child plant will not look or behave the same as the parent, with potential losses of yield, disease resistance, quality, or other agronomic performance traits. The variety should only be reproduced through clonal propagation.

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.
BREEDER	CIRAD-CATIE-ICAFE-IHCAFE-PROCAFE-ANACAFE
GENETIC DESCRIPTION	Hybrid (Ethiopian x Traditional American)
PARENTAGE	Caturra x Ethiopian landrace accession "E531'' (CATIE collection)

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/h3

UPDATED
Jun 07, 2016

CENTROAMERICA *H1*

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Very Good

YIELD POTENTIAL
Very High

STATURE
Dwarf

OPTIMAL ALTITUDE
800–1500 meters

COFFEE LEAF RUST
Resistant

NEMATODES
Tolerant

COFFEE BERRY DISEASE (CBD)
Tolerant

YEAR OF FIRST PRODUCTION
Early

NUTRITION REQUIREMENT
Very High

BEAN SIZE
Large

LEAF TIP COLOR
Green

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Very High
PLANTING DENSITY	Bourbon-like (3000-4000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	Can have difficulty establishing roots in the first two years caused by desequilibrium between the growth of radicle roots and aerial roots. Requires careful nutrition for roots to become established, avoiding too much nitrogen (N). Note: Seeds taken from hybrid plants will not have the same characteristics as the parent plants. This is called “segregation.” It means that the child plant will not look or behave the same as the parent, with potential losses of yield, disease resistance, quality, or other agronomic performance traits. The variety should only be reproduced through clonal propagation. Nematodes: Not tolerant to *Pratylenchus spp.* Is tolerant to *Meloidogyne exigua*

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.
BREEDER	CIRAD-CATIE-ICAFE-IHCAFE-PROCAFE-ANACAFE
GENETIC DESCRIPTION	Hybrid (Ethiopian x Catimor/Sarchimor)
PARENTAGE	T5296 x Rume Sudan

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/centroamerica

UPDATED
Jun 07, 2016

EVALUNA *EC18*

Very high yielding variety at elevations at high altitudes.

QUALITY POTENTIAL AT HIGH ALTITUDES
Very Good

YIELD POTENTIAL
High

STATURE
Dwarf

OPTIMAL ALTITUDE
>1200 meters

COFFEE LEAF RUST
Susceptible

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Tolerant

YEAR OF FIRST PRODUCTION
Early

NUTRITION REQUIREMENT
High

BEAN SIZE
Large

LEAF TIP COLOR
Green

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Very High
PLANTING DENSITY	F1 hybrid-like (4000-5000 a/ha)
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. Can only be reproduced through clonal propagation. Note: Seeds taken from hybrid plants will *not have the same characteristics as the parent plants.* This is called “segregation.” It means that the child plant will not look or behave the same as the parent, with potential losses of yield, disease resistance, quality, or other agronomic performance traits. The variety should only be reproduced through clonal propagation.

INTELLECTUAL PROPERTY RIGHTS	Registration in the International Union for the Protection of New Varieties of Plants (UPOV) is currently in process
BREEDER	CIRAD-ECOM
GENETIC DESCRIPTION	Hybrid (Ethiopian x Catimor)
PARENTAGE	Naryelis (Catimor) x Ethiopian landrace accession "ET06" (CATIE collection)

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/evaluna

UPDATED
Jun 07, 2016

MILENIO *H10*

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Very Good

YIELD POTENTIAL
Very High

STATURE
Dwarf

OPTIMAL ALTITUDE
800–1500 meters

COFFEE LEAF RUST
Resistant

NEMATODES
Tolerant

COFFEE BERRY DISEASE (CBD)
Tolerant

YEAR OF FIRST PRODUCTION
Early

NUTRITION REQUIREMENT
Unknown

BEAN SIZE
Large

LEAF TIP COLOR
Green

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Very High
PLANTING DENSITY	F1 hybrid-like (4000-5000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	Seeds taken from hybrid plants will *not have the same characteristics as the parent plants.* This is called "segregation." It means that the child plant will not look or behave the same as the parent, with potential losses of yield, disease resistance, quality, or other agronomic performance traits. The variety should only be reproduced through clonal propagation. Nematodes: Not tolerant to *Pratylenchus spp.* Is tolerant to *Meloidogyne exigua*

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.
BREEDER	CIRAD-CATIE-ICAFE-IHCAFE-PROCAFE-ANACAFE
GENETIC DESCRIPTION	Hybrid (Ethiopian x Sarchimor)
PARENTAGE	T5296 x Rume Sudan

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/milenio

UPDATED
Jun 07, 2016

MUNDO MAYA *EC16*

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Very Good

YIELD POTENTIAL
High

STATURE
Dwarf

OPTIMAL ALTITUDE
800–1500 meters

COFFEE LEAF RUST
Resistant

NEMATODES
Tolerant

COFFEE BERRY DISEASE (CBD)
Tolerant

YEAR OF FIRST PRODUCTION
Early

NUTRITION REQUIREMENT
High

BEAN SIZE
Large

LEAF TIP COLOR
Bronze

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Very High
PLANTING DENSITY	F1 hybrid-like (4000-5000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	Nematodes: Variety not resistant to *Pratylenchus spp.* Is tolerant to *Meloidogyne exigua*. Note: Seeds taken from hybrid plants will *not have the same characteristics as the parent plants.* This is called "segregation." It means that the child plant will not look or behave the same as the parent, with potential losses of yield, disease resistance, quality, or other agronomic performance traits. The variety should only be reproduced through clonal propagation.

INTELLECTUAL PROPERTY RIGHTS	Registration in the International Union for the Protection of New Varieties of Plants (UPOV) is currently in process
BREEDER	CIRAD-ECOM
GENETIC DESCRIPTION	Hybrid (Ethiopian x Sarchimor)
PARENTAGE	T5296 x wild Ethiopian accession "ET01" (CATIE collection)

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/mundo-maya

UPDATED
Jun 07, 2016

NAYARITA *EC19*

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

QUALITY POTENTIAL AT HIGH ALTITUDES
Very Good

YIELD POTENTIAL
High

STATURE
Dwarf

OPTIMAL ALTITUDE
>1200 meters

COFFEE LEAF RUST
Susceptible

NEMATODES
Susceptible

COFFEE BERRY DISEASE (CBD)
Tolerant

YEAR OF FIRST PRODUCTION
Early

NUTRITION REQUIREMENT
High

BEAN SIZE
Large

LEAF TIP COLOR
Green

RIPENING OF FRUIT	Average
CHERRY-TO-GREEN-BEAN OUTTURN	Very High
PLANTING DENSITY	Bourbon-like (3000-4000 a/ha)
ADDITIONAL AGRONOMIC INFORMATION	Note: Seeds taken from hybrid plants will *not have the same characteristics as the parent plants.* This is called “segregation.” It means that the child plant will not look or behave the same as the parent, with potential losses of yield, disease resistance, quality, or other agronomic performance traits. The variety should only be reproduced through clonal propagation.

INTELLECTUAL PROPERTY RIGHTS	Registration in the International Union for the Protection of New Varieties of Plants (UPOV) is currently in process
BREEDER	CIRAD-ECOM
GENETIC DESCRIPTION	Hybrid (Ethiopian x Catimor/Sarchimor)
PARENTAGE	Naryelis x wild Ethiopian accession "ET26" (CATIE collection)

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/nayarita

UPDATED
Jun 07, 2016

NEMAYA *ROOTSTOCK*

A Robusta variety used for rootstock grafting because of its high resistance to nematodes. Arabica plants (any variety) can be grafted onto Nemaya roostock to make the plant resistant to nematodes. Grafting Arabica onto Robusta rootstock has no effect on cup quality.

QUALITY POTENTIAL AT HIGH ALTITUDES
Not applicable

YIELD POTENTIAL
Not applicable

STATURE
Not applicable

OPTIMAL ALTITUDE
>600 meters

COFFEE LEAF RUST
Not applicable

NEMATODES
Resistant

COFFEE BERRY DISEASE (CBD)
Not applicable

YEAR OF FIRST PRODUCTION
Not applicable

NUTRITION REQUIREMENT
Not applicable

BEAN SIZE
Not applicable

LEAF TIP COLOR
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 *Pratylenchus spp.* and resistant to *Meloidogyne exigua, M. arenaria,* and *M. paranaensis.*

INTELLECTUAL PROPERTY RIGHTS	Public domain
BREEDER	PROMECAFE-CIRAD-CATIE
GENETIC DESCRIPTION	Coffea canephora (Robusta)
PARENTAGE	C. canephora T3561 x C. canephora T3751

WHERE TO FIND
For up-to-date information on whether its possible to obtain this variety through the World Coffee Research Verified program, please visit our website:

https://varieties.worldcoffeeresearch.org/varieties/nemaya

UPDATED
Jun 06, 2016