WORLD COFFEE RESEARCH™

Coffee Varieties Catalog

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

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

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About the Catalog

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

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

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

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

Using the Catalog

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

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

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

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

A living document

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

Genetic modification in coffee

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

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

WORLD COFFEE RESEARCH™

Arabica Varieties

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

History of Arabica

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

Coffee's movement around the globe

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

The Typica lineage

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

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

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

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

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

The Bourbon lineage

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

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

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

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

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

Bourbon was first introduced to the Americas in 1860 to southern Brazil, near Campinas.

Main types of Arabica coffee

Ethiopian Landrace

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

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

Bourbon and Typica Group

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

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

Introgressed (Catimor/Sarchimor)

Introgressed varieties are those that possess some genetic traits from another species—mainly *C. canephora* (Robusta), but also sometimes *C. liberica*. (“Introgressed” means “brought over.”) In the 1920s, a *C. arabica*and a *C. canephora* plant on the island of East Timor sexually reproduced to create a new coffee now known as the Timor Hybrid. This Arabica variety contains Robusta genetic material that allowed the plant to resist coffee leaf rust. Coffee experts realized the value of this disease resistance and began using the Timor Hybrid in experiments to create new varieties that could resist leaf rust. They selected many different lines of Timor Hybrid, and then crossed them with other varieties, most commonly the high-yielding dwarf Arabica varieties Caturra and Villa Sarchi. These crosses (Timor Hybrid x Caturra, and Timor Hybrid x Villa Sarchi) led to the creation of the two main groups of introgressed Arabica varieties: Catimors and Sarchimors. It’s important to note that, contrary to common belief, neither Catimors nor Sarchimors are themselves distinct varieties. Instead, they are groups of many different, distinct varieties with similar parentage.

Other introgressed varieties, like Batian, were created from complex multiple crosses involving the Timor Hybrid; RAB C15
is the only introgressed Arabica variety in this catalog that was not created using the Timor Hybrid—it originates from a controlled cross made by Indian breeders between an Arabusta (a different *C. arabica* x *C. robusta* cross) and the Arabica Kent variety. Many introgressed varieties are covered in this catalog. These varieties have traditionally been associated with lower cup quality than others, but they have been essential for coffee farmers for whom coffee leaf rust and coffee berry disease are a major threat.

A note about coffee leaf rust resistance

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

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

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

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

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

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

Confirmation of the breakdown of resistance in one country does not necessarily mean that resistance is broken in all countries. Consequently, information will be provided about where resistance breakdowns have been confirmed.

F1 Hybrid

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

An important note about F1 hybrids

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

Variables

STATURE

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

Dwarf, Tall, Unknown, Not applicable

LEAF TIP COLOR

What color are the tips of new leaves?

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

BEAN SIZE

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

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

YIELD POTENTIAL

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

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

QUALITY POTENTIAL AT HIGH ALTITUDE

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

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

OPTIMAL ALTITUDE

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

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

Latitude 5°N to 5°S

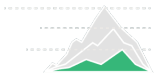
Low: 1000-1200m
Low-medium: 1000-1600m
Medium: 1200-1600m
Medium-high: >1200m
High: >1600m
Low-Medium-High: >1000m

Latitude 5-15°N or 5-15°S

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

Latitude >15°S or >15°N

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



COFFEE LEAF RUST

Is the plant susceptible to leaf rust?

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

Resistant, Tolerant, Susceptible, Unknown, Not applicable

NEMATODE

Is the plant susceptible to nematodes (specifically the species *Meloidogyne spp*. and/or *Pratylenchus spp*.)? Nematodes are microscopic animals which infect the plant roots and can cause wilting and death of the plant.

Resistant, Tolerant, Susceptible, Unknown, Not applicable

COFFEE BERRY DISEASE

Is the plant susceptible to CBD?

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

Resistant, Tolerant, Susceptible, Unknown, Not applicable

YEAR OF FIRST PRODUCTION

When will the tree produce its first fruit?

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

NUTRITION REQUIREMENT

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

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

RIPENING OF FRUIT

At what time in the harvest season will the tree fruit ripen?
For Arabica reference, Caturra = Average. No Robusta reference.

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

CHERRY TO GREEN BEAN OUTTURN

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

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

PLANTING DENSITY

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

1000-2000 per ha (using multiple-stem pruning)
2000-3000 per ha (using multiple-stem pruning)
3000-4000 per ha (using single-stem pruning)
5000-6000 per ha (using single-stem pruning)
4000-5000 per ha (using single-stem pruning)
Unknown
Not applicable

GENETIC DESCRIPTION

To which genetic group of Arabica does this variety belong?

Bourbon-Typica group (Typica related)
Bourbon-Typica group (Bourbon related)
Bourbon-Typica group (Typica and Bourbon related)
Ethiopian landrace
Introgressed (Catimor related)
Introgressed (Sarchimor related)
Introgressed (Other)
F1 hybrid (introgressed)
F1 hybrid (not introgressed)
Unknown

LINEAGE

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

BREEDER

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

Anacafe 14

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Green

BEAN SIZE

Very Large

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Medium , High

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Batian

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

STATURE

Tall

LEAF TIP COLOR

Green or Bronze

BEAN SIZE

Very Large

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Low

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Resistant

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Bourbon

One of the most culturally and genetically important *C. arabica* varieties in the world, known for excellent quality in the cup at the highest altitudes.

STATURE

Tall

LEAF TIP COLOR

Green

BEAN SIZE

Average

YIELD POTENTIAL

Medium

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Bourbon Mayaguez 139

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

STATURE

Tall

LEAF TIP COLOR

Bronze

BEAN SIZE

Large

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Bourbon Mayaguez 71

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

STATURE

Tall

LEAF TIP COLOR

Bronze

BEAN SIZE

Large

YIELD POTENTIAL

Medium

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Medium , High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Casiopea

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Bronze

BEAN SIZE

Large

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Exceptional

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

GENETIC DESCRIPTION	F1 hybrid (not introgressed)
LINEAGE	Caturra x Ethiopian wild accession "ET41" (CATIE collection)
BREEDER	CIRAD-CATIE-ICAFE-IHCAFE-PROCAFE-ANACAFE

Catimor 129 1

Unknown found type unknown

Catimor 129

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Green

BEAN SIZE

Large

YIELD POTENTIAL

Very High

LOW VERY HIGH

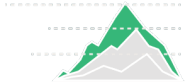
QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW EXCEPTIONAL

OPTIMAL ALTITUDE

High



COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Resistant

SUSCEPTIBLE RESISTANT

Agronomics

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

Background

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

Catisic

Adapted to warmest zones and acidic soils. High yielding.

STATURE

Dwarf/Compact

LEAF TIP COLOR

Bronze

BEAN SIZE

Average

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Low

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Low , Medium

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Catuai

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Green

BEAN SIZE

Average

YIELD POTENTIAL

Good

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Caturra

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Green

BEAN SIZE

Average

YIELD POTENTIAL

Good

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — SUSCEPTIBLE

Agronomics

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

Background

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

Centroamericano

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Green

BEAN SIZE

Large

YIELD POTENTIAL

Very High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Low , Medium , High

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Tolerant

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

GENETIC DESCRIPTION	F1 hybrid (introgressed)
LINEAGE	T5296 x Rume Sudan
BREEDER	CIRAD-CATIE-ICAFE-IHCAFE-PROCAFE-ANACAFE

Costa Rica 95

High yielding variety adapted to warmest zones and acidic soils.

STATURE

Dwarf/Compact

LEAF TIP COLOR

Bronze

BEAN SIZE

Average

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Low

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Low , Medium

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Cuscatleco

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Green

BEAN SIZE

Large

YIELD POTENTIAL

Good

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Low , Medium

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Resistant

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Unknown

Agronomics

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

Background

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

Evaluna

Very high yielding variety at elevations at high altitudes.

STATURE

Dwarf/Compact

LEAF TIP COLOR

Light Bronze

BEAN SIZE

Large

YIELD POTENTIAL

High

LOW — VERY HIGH

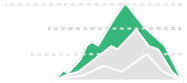
QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

High



COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Tolerant

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Fronton

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Green or Bronze

BEAN SIZE

Average

YIELD POTENTIAL

Good

LOW VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW EXCEPTIONAL

OPTIMAL ALTITUDE

Low , Medium

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY DISEASE

Unknown

Agronomics

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

Background

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

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. Geisha is also cultivated widely in Malawi.

STATURE

Tall

LEAF TIP COLOR

Green or Bronze

BEAN SIZE

Average

YIELD POTENTIAL

Medium

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Exceptional

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

High

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

GENETIC DESCRIPTION	Ethiopian landrace
LINEAGE	Ethiopian landrace
BREEDER	None

H3

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Green

BEAN SIZE

Large

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Harar Rwanda

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

STATURE

Tall

LEAF TIP COLOR

Dark Bronze

BEAN SIZE

Average

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Medium , High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

IAPAR 59

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Light Bronze

BEAN SIZE

Average

YIELD POTENTIAL

Good

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Low

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Low , Medium

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Resistant

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

IHCAFE 90

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Dark Bronze

BEAN SIZE

Average

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Low

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Low , Medium

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Jackson 2/1257

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

STATURE

Tall

LEAF TIP COLOR

Bronze

BEAN SIZE

Large

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Medium , High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE

Unknown

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Java

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

STATURE

Tall

LEAF TIP COLOR

Bronze

BEAN SIZE

Large

YIELD POTENTIAL

Medium

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

High

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Tolerant

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

GENETIC DESCRIPTION	Ethiopian landrace
LINEAGE	Ethiopian landrace
BREEDER	None

K7

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

STATURE

Tall

LEAF TIP COLOR

Light Bronze

BEAN SIZE

Large

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Low , Medium

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE — RESISTANT

NEMATODE

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Tolerant

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

KP423

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

STATURE

Tall

LEAF TIP COLOR

Light Bronze

BEAN SIZE

Average

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Low

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Medium

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Lempira

High yielding variety adapted to warmest zones and acidic soils.

STATURE

Dwarf/Compact

LEAF TIP COLOR

Bronze

BEAN SIZE

Average

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Low

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Low , Medium

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Limani

An elusive Puerto Rican variety.

STATURE

Dwarf/Compact

LEAF TIP COLOR

Bronze

BEAN SIZE

Average

YIELD POTENTIAL

Good

LOW VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW EXCEPTIONAL

OPTIMAL ALTITUDE

Low , Medium

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY DISEASE

Unknown

Agronomics

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

Background

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

Maragogipe

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

STATURE

Tall

LEAF TIP COLOR

Bronze

BEAN SIZE

Very Large

YIELD POTENTIAL

Low

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Marsellesa

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Green

BEAN SIZE

Average

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Low , Medium

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Tolerant

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Mibirizi

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

STATURE

Tall

LEAF TIP COLOR

Green or Bronze

BEAN SIZE

Large

YIELD POTENTIAL

Good

LOW VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Exceptional

VERY LOW EXCEPTIONAL

OPTIMAL ALTITUDE

High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE RESISTANT

Agronomics

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

Background

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

Milenio

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Green

BEAN SIZE

Large

YIELD POTENTIAL

Very High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Medium , High

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Tolerant

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

GENETIC DESCRIPTION	F1 hybrid (introgressed)
LINEAGE	T5296 x Rume Sudan
BREEDER	CIRAD-CATIE-ICAFE-IHCAFE-PROCAFE-ANACAFE

Mundo Maya

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Bronze

BEAN SIZE

Large

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Medium , High

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Resistant

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Tolerant

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Mundo Novo

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

STATURE

Tall

LEAF TIP COLOR

Green or Bronze

BEAN SIZE

Average

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Nayarita

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Dark Bronze

BEAN SIZE

Large

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Tolerant

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Nemaya (Coffea canephora)

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.

STATURE	LEAF TIP COLOR	BEAN SIZE
Not applicable	Not applicable	Not applicable
YIELD POTENTIAL	**QUALITY POTENTIAL AT HIGH ALTITUDE**	**OPTIMAL ALTITUDE**
Not applicable	Not applicable	Not applicable
COFFEE LEAF RUST	**NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...**	**COFFEE BERRY DISEASE**
Not applicable	Resistant	Not applicable

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

LINEAGE	*C. canephora T3561 x C. canephora T3751*
BREEDER	PROMECAFE-CIRAD-CATIE

Nyasaland

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

STATURE

Tall

LEAF TIP COLOR

Light Bronze

BEAN SIZE

Average

YIELD POTENTIAL

Good

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Medium , High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE

Unknown

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Obata (Red)

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Green

BEAN SIZE

Large

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Low , Medium

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY DISEASE

Unknown

Agronomics

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

Background

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

Oro Azteca

Adapted to warmest zones and acidic soils. High yielding.

STATURE

Dwarf/Compact

LEAF TIP COLOR

Green

BEAN SIZE

Average

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Low , Medium

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Pacamara 1

Image not found or type unknown

Pacamara

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Green or Bronze

BEAN SIZE

Very Large

YIELD POTENTIAL

Good

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Exceptional

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Pacas

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Green

BEAN SIZE

Average

YIELD POTENTIAL

Good

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Pache

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Bronze

BEAN SIZE

Large

YIELD POTENTIAL

Medium

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Parainema

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Green

BEAN SIZE

Large

YIELD POTENTIAL

Good

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Low , Medium

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Resistant

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Tolerant

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

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.

STATURE

Tall

LEAF TIP COLOR

Bronze

BEAN SIZE

Average

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Medium , High

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY DISEASE

Tolerant

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

RAB C15

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

STATURE

Tall

LEAF TIP COLOR

Green or Bronze

BEAN SIZE

Large

YIELD POTENTIAL

Very High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Medium , High

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY DISEASE

Resistant

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Ruiru 11

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Green or Bronze

BEAN SIZE

Large

YIELD POTENTIAL

Very High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Low , Medium , High

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Resistant

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

SL14

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

STATURE

Tall

LEAF TIP COLOR

Light Bronze

BEAN SIZE

Average

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Medium , High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

SL28

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

STATURE

Tall

LEAF TIP COLOR

Green

BEAN SIZE

Large

YIELD POTENTIAL

Very High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Exceptional

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Medium , High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

SL34

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

STATURE

Tall

LEAF TIP COLOR

Dark Bronze

BEAN SIZE

Large

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Exceptional

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Medium , High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Starmaya

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Green

BEAN SIZE

Large

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Medium

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY DISEASE

Unknown

Agronomics

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

Background

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

T5175

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Dark Bronze

BEAN SIZE

Average

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Low

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Low , Medium

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

T5296

Well-adapted to medium altitudes. Variety not uniform.

STATURE

Dwarf/Compact

LEAF TIP COLOR

Green

BEAN SIZE

Large

YIELD POTENTIAL

Good

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Low , Medium

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE — RESISTANT

NEMATODE

Unknown

COFFEE BERRY DISEASE

Tolerant

SUSCEPTIBLE — SUSCEPTIBLE

Agronomics

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

Background

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

T8667

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Bronze

BEAN SIZE

Average

YIELD POTENTIAL

High

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Low

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Low , Medium

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Tekisic

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

STATURE

Tall

LEAF TIP COLOR

Green

BEAN SIZE

Average

YIELD POTENTIAL

Medium

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

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.

STATURE

Tall

LEAF TIP COLOR

Bronze

BEAN SIZE

Large

YIELD POTENTIAL

Low

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Very Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Venecia

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Green

BEAN SIZE

Large

YIELD POTENTIAL

Good

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

Medium , High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Villa Sarchi

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

STATURE

Dwarf/Compact

LEAF TIP COLOR

Green

BEAN SIZE

Below Average

YIELD POTENTIAL

Good

LOW — VERY HIGH

QUALITY POTENTIAL AT HIGH ALTITUDE

Good

VERY LOW — EXCEPTIONAL

OPTIMAL ALTITUDE

High

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE — RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE — RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE — RESISTANT

Agronomics

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

Background

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

Robusta Varieties

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

Introduction

Coffee is one of the most important cash crops in the world, generating significant foreign exchange and supporting the livelihoods of millions of people globally. Over the last 30 years, demand for coffee has grown steadily, leading to an expansion in production and exports.

There are 131 species in the *Coffea* genus known to science (Davis, et al., 2021), with two that are cultivated widely and on a global scale—*Coffea arabica* (commercially known as arabica) and *Coffea canephora* (commercially known as robusta). Throughout this essay and the catalog generally, we use this term "robusta" to refer to the entire *C.canephora* species and all its subtypes.

Until recently, arabica held reign over most of the coffee market due to preferences for its cup quality, but various factors, including the increasing demand for coffee, have led to expansions in the production of robusta, as the species requires less stringent growing conditions and possesses a certain level of resistance to pests and diseases that often plague farm productivity. Robusta production expanded rapidly after the emergence of soluble coffee in the 1950s.

Presently, approximately 60% of the coffee produced and marketed in the world comes from arabica plants and 40% comes from robusta plants (ICO, 2021).

The top global producers of robusta are currently Vietnam, Brazil, Indonesia, Uganda, and India, which together produce over 90% of the world's robusta (Slipchenko, 2021). Of these producers, Vietnam and Uganda are the foremost exporters of robusta (Brazil, for example, retains a substantial portion of its production for internal consumption).

However, an increasing number of countries that currently restrict or have previously restricted coffee production to arabica are beginning to explore robusta; these include Mexico, Nicaragua, Guatemala, and Colombia, among others. Additionally, there is growing interest in exploring the potential of increasing the cup quality of robusta.

About Robusta

Coffea canephora Pierre ex A. Froehner is a species of coffee that originated in central and western sub-Saharan Africa. In the wild, it is found mainly in the understory of humid,evergreen forests (but sometimes in seasonally dry humid forests or gallery forests) with elevations ranging from 50 to 1500 m above sea level (Davis, et al., 2006).

The interest in producing Robusta at a global level resides in the fact that it can be grown in a wider range of climates and altitudes compared to arabica, which requires precise conditions in order to thrive, like heavy shade and high altitudes. In contrast to arabica, robusta plants typically have a greater crop yield, contain higher levels of caffeine, lower levels of sugar, higher levels of soluble solids, and are less susceptible to damaging pests and diseases (Goldemberg et al., 2015). Further, robusta can be grown in hotter, more humid temperature ranges, found in lower altitudes between 200 – 800meters (Slipchenko, 2021), and often requires less maintenance via herbicide and pesticide (Daviron & Ponte, 2005). Despite these attributes, robusta is still sensitive to environmental disturbances. Research suggests that robusta's ability to thrive in hotter climates may be overstated and that temperatures over 20.5 degrees centigrade can have a significant negative impact on yields Kath et al., 2020). Additionally, many robusta varieties are still susceptible to key diseases and pests, such as coffee leaf rust, stem borer, coffee berry disease, coffee berry borer, *and nematodes,* among others (Vega et al.,2006)

Due to the aforementioned benefits, though, robusta is often easier to farm,allows for greater productivity, and is more cost-effective to produce than arabica. Ongoing climate predictions of rising temperatures and altered precipitation patterns by 2050 indicate that arabica cultivation may no longer be sustainable in the coming years, which may, in turn, increase the production of robusta by a significant margin (Bunn, et al., 2015, Kath, et al., 2023, Dinh, et al., 2022, Kath et. al, 2022, de Aquino,et al., 2022). Even so, robusta faces its own limitations and climate vulnerability (Tournebize, et al., 2022).

The beans that come from robusta production generate differences in terms of taste and cup quality (Leroy, et al., 2006). For instance, coffee brewed from robusta beans is often lower in acidity, higher in bitterness, and more "full-bodied" due to its pyrazine content (Miyanari, 2008), an aromatic known for its earthiness. But when handled and processed properly, robusta can serve as a product for specialty markets (Uganda Coffee Development Authority, 2019).

Robusta Diversity

Many different common terms are used to describe robusta in the areas where it is grown.These include “robusta,” “conilon,” “nganda,” “koillou/quillou,” and others. These terms are generally regional, colloquial, and do not necessarily correspond to specific genetically distinct varieties/clones that have been developed and released by breeders over the years. Because robusta cross-pollinates—a single robusta tree cannot successfully pollinate its own flowers, as arabica trees can do; scientists call this allogamous (Nowak, et al., 2011)—subtypes grown in the same field typically interbreed (Thomas, 1935). A consequence of this mating system is that the majority of cultivated robusta is still made up of unselected populations obtained from open-pollinated seeds (Labouisse et al, 2020). For more background on Robusta breeding, see Montagnon, Thierry, and Eskes, 1998a & b.

Put simply, robusta plantations are not genetically uniform; consequently, many robusta farmers have little awareness of which variety or subtypes they are growing. This is one reason why colloquially, *C. canephora* is often referred to as simply “robusta,” as described and commercialized by Linden in 1900 (Dagoon, 2005).

Because robusta is a cross-pollinating species (i.e., it requires pollen from two different types of plants in order to produce new cherries), it is necessary for farmers to grow more than one type of robusta in their fields in order to have successful pollination and fruit production. Some breeding programs have developed and released“polyclonal” or “multi-line” varieties to address this challenge where the “variety” is an intentional mix of genetically distinct clones (Campuzano, et al., 2022, Montagnon, et al.,2003, Berthaud & Charrier, 1998).

However, not all robusta types can successfully grow together in a field. The cross-compatibility of types is genetically controlled. Some varieties are unable to fertilize one another (Lashermes et al., 1996, Prakash, 2018). So far, research on optimal combinations of subtypes in production has been scarce, but one key consideration is simultaneous flowering.

In different production regions, how such mixes are released and distributed for farmers is handled differently. It is common in West Africa, for example, for breeders to create polyclonal seed varieties (i.e., multiple different types of robusta are distributed together in the same seed packets to farmers). In Brazil, it is more common for breeders to create multiple unique clones that are then tested for compatibility; the highest-performing complimentary clones are then propagated and released to farmers (Depolo, et al., 2022, Surya, 2018).

The scope of genetic diversity in robusta coffee is much larger than that of arabica. There are many unknown variations (including traits related to cup quality) in the robusta gene pool. By and large, these hidden variations are yet to be explored by breeders.

History of cultivation & dispersal

Robusta originates from humid lowland forests in tropical areas of Africa, an area with a wide natural geographic distribution from Guinea to Uganda and Angola, growing in numerous forms and ecotypes. It has been surveyed and prospected by ORSTOM and FAO missions (Dussert et al., 1999). The exact natural origins of the cultivated types are difficult to know for certain given the widespread introduction and naturalization of different subtypes around the region and the gene flow between wild and nearby plantations (Davis, 2006, Kiwuka et al., 2021).

Cultivation of the species began around 1870 in Congo, using material coming from Zaïre's Lomami River region, now known as the Democratic Republic of Congo (Berthaud& Charrier, 1988). A subtype of robusta called "kouillou" (later renamed "conilon" vialinguistic distortion when it was introduced to Brazil) was observed in the wild by the French in 1880 between Gabon and the mouth of the Congo River, mainly along the Kouilou-Nari River region. The species was named C. canephora by the botanist Louis Pierre in 1895. Pierre, who worked in France at the Muséum National d'Histoire Naturelle,received a sample of the plant collected in Gabon by the Reverend Théophile Klaine. The name was first published along with a description of the species by Froehner in 1897. In 1898, Edouard Luja, in preparation for the 1900 Paris Exposition, was sent to collect 10species with economic potential in the Congo. During this mission, Luja collected several thousand seeds in the surroundings of Lusambo of a 'new' coffee species (Benoit, 1968).These seeds were probably collected on an early robusta plantation in the region. Belgian Congo became one of the principal breeding centers, from which breeding lines were distributed throughout the tropics.

At the turn of the century, the species began to spread to other parts of the world.Robusta seeds from Congo were sent to Brussels, and from there it was sent under the name "robusta" to Java, Indonesia, where it was quickly accepted by farmers due to its productivity and apparent resistance to coffee leaf rust (Cramer, 1957), as a major outbreak occurred in Southeast Asia in the late 1800s. These materials were later enriched with those from Gabon and Uganda. Around the same time, other Robusta material selected from wild populations was brought to areas of Ivory Coast, Guinea, and Uganda (Charrier and Eskes, 1997).

From here, robusta continued to move around the world, entering India by way of Java (with later introductions from west Africa). Material selected in Java was reintroduced to central Africa from 1910 onward, and to the Belgian Congo in 1916 at the Institut National pour Étude Agronomique du Congo (INEAC), which served as the home to the majority of selection from 1930 to 1960. Within Africa, robusta production grew in Madagascar, Uganda, Ghana, and the Ivory Coast, often intermingling endemic variants with those introduced from commercial production in other parts of the continent.

As noted previously, much of the movement of robusta and the increase in the popularity of its production during this period may be attributed to the spread of coffee leaf rust (CLR), a fungal disease that ravages coffee plants. One of the greatest benefits of robusta production is that the species possesses a natural resistance to some of the major pests and diseases that impact coffee production; they can thrive under harsh conditions (Campuzano, et al., 2022).

Robusta was later introduced to Latin America, and in particular Brazil, with some additional commercial introductions in Central America via Guatemala between 1930–1935. Further, CATIE in Costa Rica introduced robusta plants called "French lines" between 1981–1983.

In present day, countries that lie within Asia and Oceania are collectively the largest producers of robusta, generating 60% of the world's output at 41.5 million 60 kg bags annually. This region is followed by South America, which produces 28% of the world's share of robusta, generating 19.8 million bags of coffee in the 2020–2021 year.

C. canephora is a diploid (2n=2x=22) species divided into two broad genetic groups, Guinean and Congolese. The Guinean group originated in central-west Africa, while the Congolese group originated in central Africa. Among these two groups, the Guinean is the most widespread. In addition, within each group, there are different populations, or subgroups. Within the Guinean group, there are at least two subgroups, named “kouilou” or “conilon,” and “robusta.” However, more recent studies using advanced genetics techniques, have further refined the robusta species into eight subcategories. Studies of the genetic relationships within *C. canephora* have shown that, in general, these populations are well differentiated and genetically isolated (Berthaud, 1986, Montagnon, 1992, Cubry, et al., 2008, Musoli, et al., 2009, Dussert et al., 1999, Gomez et al. 2009, Mérot-L’Anthoëne et al., 2019). Montagnon (1992) proposed a substructure within the Congolese group with two subdivisions, SG1 and SG2. Dussert (1999) added two extra groups (including B and C, as referenced below) to the Congolese group. However, these subgroups are not necessarily visually distinct from one another (Chadburn & Davis, 2017, Charr et al., 2020).

Image source: Mérot-L'Anthoene et al. 2019 (Fig. 3).

Using RFLP and SSR markers, Gomez et al. (2005) pooled *C. canephora* genetic diversity into five genetic groups (A, B, C, D, and E). Geographically, genetic group A comprised wild populations from Congo and Cameroon, group B from eastern-central Africa, group C from western-central Africa, Cameroon and northeastern Congo, group E from Congo and southern Cameroon, while group D consisted of wild populations from Côte d’Ivoire and Guinea, separated geographically by the Dahomey Gap from the other diversity groups. Musoli et al. (2009) further determined that some Ugandan wild populations clustered into another distinct group (group O). Finally, Mérot-L’Anthoëne et al. (2019), using a genome-wide Coffee 8.5K SNP array, described *C. canephora* genetic diversity with eight distinct genetic groups, including the Ugandan one (group O), thus identifying two new genetic groups, (comprising samples from southern Democratic Republic of the Congo) and G (comprising samples from Angola), whereas the differentiation between groups E and R was weaker.

Wild populations are the primary genetic relative of robusta coffee, and cultivated coffee has changed little from its wild progenitors. It is also a secondary genetic relative of arabica, conferring potential disease and pest resistance (Chadburn & Davis, 2017).

As a part of the genetic conservation of the species, gene banks of robusta were established in several producing countries in Africa and Asia. There are currently 40 known collections of this species held in ex-situ collections (Tram, et al., 2022, Botanic Gardens International, PlantSearch). The species was set into collection in Côte d'Ivoire, with 700 wild genotypes by ORSTROM in collaboration with the Center de Coopération Internationale en Recherche Agronomique Pour Development.

In addition, the species was collected in Guinea, Cameroon, the Congo, and Central African Republic and later introduced into field gene banks. The species is found in protected areas such as Mangala Forest Reserve in Tanzania, Bia National Park in Ghana, Isalowe Forest Reserve in the Democratic Republic of Congo, and Reserve du Dja in Cameroon.

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Variables

YIELD POTENTIAL

What is the yield potential of this variety in kg/ha of green beans? *Note that yield can vary significantly depending on environmental conditions and how the variety is managed. Yield values presented here are the result of specific limited field trials undertaken by the breeders of this variety; they do not represent guarantees of yield.*

COUNTRY OF RELEASE

In which countries is the variety commercially available?

Mexico, Uganda, Indonesia, India, Vietnam, Brazil, Thailand, Philippines, Nicaragua

CONTENTS OF MUCILAGE IN THE CHERRY

What is the relative amount of mucilage in the cherry? (Mucilage is the inner layer of coffee pulp that remains attached to the parchment after pulping.)

Low , Average, High, Unknown, Not applicable

BEAN SIZE

How big are the coffee beans?

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

COFFEE LEAF RUST

Is the plant susceptible to leaf rust?

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

Resistant, Tolerant, Susceptible, Unknown, Not applicable

COFFEE BERRY DISEASE

Is the plant susceptible to CBD?

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

Resistant, Tolerant, Susceptible, Unknown, Not applicable

NEMATODE

Is the plant susceptible to nematodes (specifically the species *Meloidogyne spp*. and/or *Pratylenchus spp*.)? Nematodes are microscopic animals which infect the plant roots and can cause wilting and death of the plant.

Resistant, Tolerant, Susceptible, Unknown, Not applicable

COFFEE BERRY BORER

Is the plant susceptible to coffee berry borer? Coffee berry borer (*Hypothenemus hampei*), called broca in Spanish, is a bark beetle endemic to Central Africa that is now distributed throughout all coffee-producing countries in the world, with the exception of Nepal and Papua New Guinea.

Resistant, Tolerant, Susceptible, Unknown, Not applicable

SHOOT HOLE BORER (_XYLOSANDUS COMPACTUS_)

Is the plant susceptible to shoot hole borers (*Xylosandus compactus*)? Shoot hole borer is a species of ambrosia beetle. Common names for this beetle include black twig borer, black coffee borer, black coffee twig borer, and tea stem borer.

Resistant, Tolerant, Susceptible, Unknown, Not applicable

STATURE

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

Dwarf, Tall, Unknown, Not applicable

YEAR OF FIRST PRODUCTION

When will the tree produce its first fruit?

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

NUTRITION REQUIREMENT

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

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

RIPENING OF FRUIT

At what time in the harvest season will the tree fruit ripen?
For Arabica reference, Caturra = Average. No Robusta reference.

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

CHERRY TO GREEN BEAN OUTTURN

What is the ratio of the volume of green bean in relation to the cherry/fruit (given as a percentage)?

PLANTING DENSITY

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

1000-2000 per ha (using multiple-stem pruning)
2000-3000 per ha (using multiple-stem pruning)
3000-4000 per ha (using single-stem pruning)
5000-6000 per ha (using single-stem pruning)
4000-5000 per ha (using single-stem pruning)
Unknown
Not applicable

LEAF TIP COLOR

What color are the tips of new leaves?

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

TYPE

What type of Robusta variety is it? *When an individual plant is selected for its unique or superior qualities and is held separate for propagation, the plants propagated from this mother plant are called clones. They are exact genetic copies of the mother. Because Robusta is an out-crossing species, it requires that more than one clone be planted in the same field in order to produce fruit. Polyclonal varieties are composed of an intentional mix of genetically distinct clones. Synthetic varieties are developed by allowing open pollination to occur for several generations among a number of different cultivars, such as inbreds.*

Clone, Polyclonal, Polyclonal/synthetic

GENETIC DESCRIPTION

To which genetic group of Robusta does this variety belong?

Guinea group
Congo group
Uganda group
Guinea x Congo group
Guinea x *Coffea congensis* group
Unknown

LINEAGE

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

BREEDER

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

BP 534

Most commonly grown clone by farmers in Indonesia; suitable for cultivation under agroforestry systems.

YIELD POTENTIAL

1700-2200 kg/ha

COUNTRY OF RELEASE

Indonesia

CONTENTS OF MUCILAGE IN THE CHERRY

Average

BEAN SIZE

Large (screen size >17)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Tolerant

SUSCEPTIBLE RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY BORER

Susceptible

SUSCEPTIBLE RESISTANT

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	21%
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Light Bronze
ADDITIONAL AGRONOMIC INFORMATION	Suitable for wet climates in areas with elevation 400–900 meters above sea level. The plant has short internodes. There is a clear white line on green cherry. This clone is susceptible to *Pratylenchus coffeae*. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Congo group
LINEAGE	Individual selection labeled 6 from a Congolensis population.
BREEDER	Indonesian Coffee and Cocoa Research Institute (ICCRI)

BP 936

Wide adaptability to different environments, with optimal productivity in areas with wet climates; suitable for cultivation under agroforestry systems.

YIELD POTENTIAL

1600-2200 kg/ha

COUNTRY OF RELEASE

Indonesia

CONTENTS OF MUCILAGE IN THE CHERRY

Average

BEAN SIZE

Large (screen size >17)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Tolerant

SUSCEPTIBLE RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY BORER

Susceptible

SUSCEPTIBLE RESISTANT

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	20%
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Light Bronze
ADDITIONAL AGRONOMIC INFORMATION	The clone has wide adaptability, but optimal productivity will be achieved in wet climates areas with elevations ranging from 400–900 meters above sea level. This clone is susceptible to *Pratylenchus coffeae*. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Congo group
LINEAGE	SA 164-11 x BP 42
BREEDER	Indonesian Coffee and Cocoa Research Institute (ICCRI)

BP 939

Wide adaptability to different environments that produces best in areas with dry climates; suitable for cultivation under agroforestry systems.

YIELD POTENTIAL

1400-1900 kg/ha

COUNTRY OF RELEASE

Indonesia

CONTENTS OF MUCILAGE IN THE CHERRY

Average

BEAN SIZE

Large (screen size >17)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Tolerant

SUSCEPTIBLE RESISTANT

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY BORER

Susceptible

SUSCEPTIBLE RESISTANT

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	21%
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Light Bronze
ADDITIONAL AGRONOMIC INFORMATION	The clone has wide adaptability but optimal productivity will be achieved in dry climate areas with altitudes ranging between 400–900 meters above sea level. This clone is susceptible to *Pratylenchus coffeae*. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Congo group
LINEAGE	BP 42 x SA 1366
BREEDER	Indonesian Coffee and Cocoa Research Institute (ICCRI)

BRS 1216

Adaptable to the environments of the Western Amazon with high productivity. Plant structure suitable for mechanized harvesting. Resistant to nematodes and coffee rust.

YIELD POTENTIAL

7200 kg/ha

COUNTRY OF RELEASE

Brazil

CONTENTS OF MUCILAGE IN THE CHERRY

High

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Desconocido

NEMATODE

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY BORER

Susceptible

SUSCEPTIBLE RESISTANT

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Dwarf/Compact
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	25%
PLANTING DENSITY	2000-3000 plants/ha (using multiple-stem pruning)
LEAF TIP COLOR	Light Bronze
ADDITIONAL AGRONOMIC INFORMATION	High yield per hectare when established in full sun with no shade. When in an environment with low water availability in the soil, it shows generalized yellowing. Overall beverage quality score (Specialty Coffee Association) = 79 points. Flavor attributes: Chocolate, cereals, woody. Highest fruit set will occur when planted with other clones in gametophytic compatibility Groups II and III, as this variety is from Group I.

Background

TYPE	Polyclonal
GENETIC DESCRIPTION	Guinea x Congo group
LINEAGE	Robusta 1675 x Encapa 03
BREEDER	Brazilian Agricultural Research Corporation (EMBRAPA)

BRS 2299

Plant structure suitable for mechanized harvesting. Stands out for its tolerance to the root-knot nematode *Meloidogyne sp*.

YIELD POTENTIAL

6600 kg/ha

COUNTRY OF RELEASE

Brazil

CONTENTS OF MUCILAGE IN THE CHERRY

Average

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY BORER

Susceptible

SUSCEPTIBLE RESISTANT

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Dwarf/Compact
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	25%
PLANTING DENSITY	2000-3000 plants/ha (using multiple-stem pruning)
LEAF TIP COLOR	Light Bronze
ADDITIONAL AGRONOMIC INFORMATION	Presents high yield per hectare when established in full sun with no shade. It can present a greater unevenness in the ripening of fruits, caused by irregular flowering in years of greater rain frequency during the dry season. Overall beverage quality score (Specialty Coffee Association) = 70 points. Flavor attributes: Neutral, cereal, herbal. Highest fruit set will occur when planted with other clones in gametophytic compatibility Groups I and III, as this variety is from Group II.

Background

TYPE	Polyclonal
GENETIC DESCRIPTION	Guinea x Congo group
LINEAGE	Unknown parents. Natural cross between conilon and robusta plants. These were selected from farmers' fields.
BREEDER	Brazilian Agricultural Research Corporation (EMBRAPA)

BRS 2314

High cupping scores; has been classified as a 'fine robusta.'

YIELD POTENTIAL

6600 kg/ha

COUNTRY OF RELEASE

Brazil

CONTENTS OF MUCILAGE IN THE CHERRY

Average

BEAN SIZE

Small (screen size 14 or below)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Not applicable

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY BORER

Susceptible

SUSCEPTIBLE RESISTANT

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Dwarf/Compact
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	25%
PLANTING DENSITY	2000-3000 plants/ha (using multiple-stem pruning)
LEAF TIP COLOR	Light Bronze
ADDITIONAL AGRONOMIC INFORMATION	Presents high yield per hectare under irrigation. This cultivar has received 80 points or more in all the cupping events conducted, reaching 87.2 points in one of the samples. Following the Fine Robustas Tasting Protocol developed by the Coffee Quality Institute, it has been classified as a 'Fine Robusta.' Average beverage quality score (Specialty Coffee Association) = 80 points. Flavor attributes: chocolate, caramel, fruit. Highest fruit set will occur when planted with other clones in gametophytic compatibility Groups I and III, as this variety is from Group II.

Background

TYPE	Polyclonal
GENETIC DESCRIPTION	Guinea x Congo group
LINEAGE	Robusta 640 X Encapa 03
BREEDER	Brazilian Agricultural Research Corporation (EMBRAPA)

BRS 2336

Adaptable to the environments of the Western Amazon, with high productivity and bean size.

YIELD POTENTIAL

7200 kg/ha

COUNTRY OF RELEASE

Brazil

CONTENTS OF MUCILAGE IN THE CHERRY

High

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Not applicable

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE RESISTANT

COFFEE BERRY BORER

Susceptible

SUSCEPTIBLE RESISTANT

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Dwarf/Compact
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	25%
PLANTING DENSITY	2000-3000 plants/ha (using multiple-stem pruning)
LEAF TIP COLOR	Light Bronze
ADDITIONAL AGRONOMIC INFORMATION	Presents high yield per hectare when established in full sun with no shade. Resistant to water stress; however, irrigation is recommended. Leaves demonstrate the behavior of plants under water stress, even in conditions of high water availability. Beverage quality score (Specialty Coffee Association) = 75 points. Flavor attributes: sweet aftertaste, soft. Highest fruit set will occur when planted with other clones in gametophytic compatibility Groups I and III, as this variety is from Group II.

Background

TYPE	Polyclonal
GENETIC DESCRIPTION	Guinea x Congo group
LINEAGE	Unknown parents. Natural cross between conilon and robusta plants. These were selected from farmers' fields.
BREEDER	Brazilian Agricultural Research Corporation (EMBRAPA)

BRS 2357

Compact canopy, which allows for densification. Short stems allow one additional harvest before renewal.

YIELD POTENTIAL

6000 kg/ha

COUNTRY OF RELEASE

Brazil

CONTENTS OF MUCILAGE IN THE CHERRY

Average

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Susceptible

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE

Susceptible

SUSCEPTIBLE RESISTANT

COFFEE BERRY BORER

Susceptible

SUSCEPTIBLE RESISTANT

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Dwarf/Compact
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	25%
PLANTING DENSITY	2000-3000 plants/ha (using multiple-stem pruning)
LEAF TIP COLOR	Dark Bronze
ADDITIONAL AGRONOMIC INFORMATION	Presents high yield per hectare when established in full sun with no shade. It has small, narrow leaves that allow good air circulation inside its crown. It is susceptible to the root-knot nematode, and is susceptible to coffee leaf rust. Beverage quality score (Specialty Coffee Association) = 70 points. Flavor attributes: neutral, no attributes worth highlighting. Highest fruit set will occur when planted with other clones in gametophytic compatibility Groups I and III, as this variety is from Group II.

Background

TYPE	Polyclonal
GENETIC DESCRIPTION	Guinea x Congo group
LINEAGE	Unknown parents. Natural cross between conilon and robusta plants. These were selected from farmers' fields.
BREEDER	Brazilian Agricultural Research Corporation (EMBRAPA)

BRS 3137

Recognized for its rusticity, presenting good vegetative and productive characteristics in dry conditions and low-fertility soils.

YIELD POTENTIAL

6600 kg/ha

COUNTRY OF RELEASE

Brazil

CONTENTS OF MUCILAGE IN THE CHERRY

Average

BEAN SIZE

Small (screen size 14 or below)

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Not applicable

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Tolerant

SUSCEPTIBLE RESISTANT

COFFEE BERRY BORER

Susceptible

SUSCEPTIBLE RESISTANT

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Dwarf/Compact
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Early
CHERRY TO GREEN BEAN OUTTURN	25%
PLANTING DENSITY	2000-3000 plants/ha (using multiple-stem pruning)
LEAF TIP COLOR	Light Bronze
ADDITIONAL AGRONOMIC INFORMATION	Beverage quality score (Speciality Coffee Association) = 70 points. Flavor attributes: neutral. Highest fruit set will occur when planted with other clones in gametophytic compatibility Groups I and II, as this variety is from Group III.

Background

TYPE	Polyclonal
GENETIC DESCRIPTION	Guinea x Congo group
LINEAGE	Unknown parents. Natural cross between conilon and robusta plants. These were selected from farmers' fields.
BREEDER	Brazilian Agricultural Research Corporation (EMBRAPA)

BRS 3193

Long primary branches. Production peak in the second or third commercial harvest due to its initial growth, which reduces the biannual production of the crop by compensating for lower yields of other clones.

YIELD POTENTIAL

6000 kg/ha

COUNTRY OF RELEASE

Brazil

CONTENTS OF MUCILAGE IN THE CHERRY

Average

BEAN SIZE

Small (screen size 14 or below)

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Not applicable

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Tolerant

SUSCEPTIBLE RESISTANT

COFFEE BERRY BORER

Susceptible

SUSCEPTIBLE RESISTANT

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Dwarf/Compact
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Early
CHERRY TO GREEN BEAN OUTTURN	25%
PLANTING DENSITY	2000-3000 plants/ha (using multiple-stem pruning)
LEAF TIP COLOR	Light Bronze
ADDITIONAL AGRONOMIC INFORMATION	Recognized for having the longest length of productive branches among the genotypes studied, and for presenting with a high number of rosettes per branch. Beverage quality score (Specialty Coffee Association) = 75 points. Flavor attributes: chocolate, caramel, almond. Highest fruit set will occur when planted with other clones in gametophytic compatibility Groups I and II, as this variety is from Group III.

Background

TYPE	Polyclonal
GENETIC DESCRIPTION	Guinea x Congo group
LINEAGE	Unknown parents. Natural cross between conilon and robusta plants. These were selected from farmers' fields.
BREEDER	Brazilian Agricultural Research Corporation (EMBRAPA)

BRS 3210

Good adaptability and stability in the environments of the Western Amazon. Good productivity and bean size.

YIELD POTENTIAL

7200 kg/ha

COUNTRY OF RELEASE

Brazil

CONTENTS OF MUCILAGE IN THE CHERRY

High

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Not applicable

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE RESISTANT

COFFEE BERRY BORER

Susceptible

SUSCEPTIBLE RESISTANT

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	25%
PLANTING DENSITY	2000-3000 plants/ha (using multiple-stem pruning)
LEAF TIP COLOR	Green
ADDITIONAL AGRONOMIC INFORMATION	Resistant to water stress, however, irrigation is recommended. Even in conditions of high water availability, its leaves demonstrate the behavior of plants under water stress. Presents high yield per hectare, 120 60-kg bags. Beverage quality score (Specialty Coffee Association) = 75 points. Attributes: Sweet aftertaste, soft. This cultivar is established in full sun with no shade. Highest fruit set will occur when planted with other clones in gametophytic compatibility Groups I and II, as this variety is from Group III.

Background

TYPE	Polyclonal
GENETIC DESCRIPTION	Guinea x Congo group
LINEAGE	Unknown parents. Natural cross between conilon and robusta plants. These were selected from farmers' fields.
BREEDER	Brazilian Agricultural Research Corporation (EMBRAPA)

BRS 3213

Adaptable to the environments of the Western Amazon recognized for good productivity and bean size.

YIELD POTENTIAL

7200 kg/ha

COUNTRY OF RELEASE

Brazil

CONTENTS OF MUCILAGE IN THE CHERRY

High

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE

Susceptible

SUSCEPTIBLE RESISTANT

COFFEE BERRY BORER

Susceptible

SUSCEPTIBLE RESISTANT

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	25%
PLANTING DENSITY	2000-3000 plants/ha (using multiple-stem pruning)
LEAF TIP COLOR	Green
ADDITIONAL AGRONOMIC INFORMATION	Presents high yield per hectare when established in full sun with no shade. Resistant to water stress, however, irrigation is recommended. Even in conditions of high water availability, its leaves demonstrate the behavior of plants under water stress. Beverage quality score (Specialty Coffee Association) = 75 points. Flavor atributes: sweet aftertaste, soft. Highest fruit set will occur when planted with other clones in gametophytic compatibility Groups I and II, as this variety is from Group III.

Background

TYPE	Polyclonal
GENETIC DESCRIPTION	Guinea x Congo group
LINEAGE	Unknown parents. Natural cross between conilon and robusta plants. These were selected from farmers' fields.
BREEDER	Brazilian Agricultural Research Corporation (EMBRAPA)

BRS 3220

Adaptable to the environments of the Western Amazon, recognized for good productivity and bean size.

YIELD POTENTIAL

6600 kg/ha

COUNTRY OF RELEASE

Brazil

CONTENTS OF MUCILAGE IN THE CHERRY

High

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Not applicable

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Susceptible

SUSCEPTIBLE RESISTANT

COFFEE BERRY BORER

Susceptible

SUSCEPTIBLE RESISTANT

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	25%
PLANTING DENSITY	2000-3000 plants/ha (using multiple-stem pruning)
LEAF TIP COLOR	Green
ADDITIONAL AGRONOMIC INFORMATION	Presents high yield per hectare when established in full sun with no shade. Resistant to water stress, however, irrigation is recommended. Even in conditions of high water availability, its leaves demonstrate the behavior of plants under water stress. Beverage quality score (Specialty Coffee Association) = 75 points. Flavor attributes: sweet aftertaste, soft. Highest fruit set will occur when planted with other clones in gametophytic compatibility Groups I and II, as this variety is from Group III.

Background

TYPE	Polyclonal
GENETIC DESCRIPTION	Guinea x Congo group
LINEAGE	Unknown parents. Natural cross between conilon and robusta plants. These were selected from farmers' fields.
BREEDER	Brazilian Agricultural Research Corporation (EMBRAPA)

INIFAP 00-24

Compact plant grown under the conditions of the Chiapas coast in Mexico. Reduced plant size lends itself to higher yields in dry conditions and differentiates it from any other clone.

YIELD POTENTIAL

Unknown/Desconocido- kg/ha

COUNTRY OF RELEASE

Mexico

CONTENTS OF MUCILAGE IN THE CHERRY

Low

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE

Unknown

COFFEE BERRY BORER

Susceptible

SUSCEPTIBLE RESISTANT

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Susceptible

SUSCEPTIBLE RESISTANT

Agronomics

STATURE	Dwarf/Compact
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Unknown/Desconocido
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Light Bronze
ADDITIONAL AGRONOMIC INFORMATION	Has the tendency to produce more than three productive stems per plant with heavy fruit load. Combined with typical multiplication by rooted cuttings, it means the plant may need to be staked. However, this typically does not become a problem and rather facilitates the harvest. Usually cultivated at 700 meters above sea level. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Guinea group
LINEAGE	Unknown
BREEDER	Nestlé Research/Instituto Nacional de Investigaciones Forestales Agricolas y Pecuarias

INIFAP 00-28

Tall plants with large and numerous leaves and fruits; highest-yielding clone for the conditions of the coast of Chiapas, Mexico.

YIELD POTENTIAL

Unknown/Desconocido- kg/ha

COUNTRY OF RELEASE

Mexico

CONTENTS OF MUCILAGE IN THE CHERRY

Low

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE SUSCEPTIBLE

NEMATODE

Unknown

COFFEE BERRY BORER

Susceptible

SUSCEPTIBLE RESISTANT

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Susceptible

SUSCEPTIBLE RESISTANT

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	Unknown/Desconocido
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Green
ADDITIONAL AGRONOMIC INFORMATION	This clone does not produce many shoots and, normally, the plant is formed with 1 or 2 productive stems. Susceptible to stem and shoot hole borer and coffee berry disease (CBD). Typically cultivated at 700 meters above sea level. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Congo group
LINEAGE	Unknown
BREEDER	Nestlé Research/Instituto Nacional de Investigaciones Forestales Agricolas y Pecuarias (INIFAP)

INIFAP 95-9

Tall plant with very large fruit. Susceptible to shoot hole borer.

YIELD POTENTIAL

Unknown/Desconocido- kg/ha

COUNTRY OF RELEASE

Mexico

CONTENTS OF MUCILAGE IN THE CHERRY

Average

BEAN SIZE

Large (screen size >17)

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Not applicable

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY BORER

Susceptible

SUSCEPTIBLE RESISTANT

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Unknown/Desconocido
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Green
ADDITIONAL AGRONOMIC INFORMATION	This clone is preferred by growers in the coastal region of Chiapas, Mexico. Farmers coloquially refer to it as 'improved robusta' due to its fruit size, which is reflected in good production per unit area. It is susceptible to coffee berry borer; no rust damage has been observed. The multiplication is via seed, which does not guarantee homogeneity of the resulting population. Mucilage detaches easily through pulping and fermentation. This clone is typically cultivated at 700 meters above sea level. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Congo group
LINEAGE	Unknown
BREEDER	Mexican Coffee Institute (INMECAFE)/INIFAP

INIFAP 97-14

Tall growth, tendency to form plants with more than three productive stems and good yield of cherries. Very susceptible to stem borers and anthracnose.

YIELD POTENTIAL

Unknown/Desconocido- kg/ha

COUNTRY OF RELEASE

Mexico

CONTENTS OF MUCILAGE IN THE CHERRY

Low

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Not applicable

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY BORER

Susceptible

SUSCEPTIBLE RESISTANT

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Susceptible

SUSCEPTIBLE RESISTANT

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Very Late
CHERRY TO GREEN BEAN OUTTURN	Unknown/Desconocido
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Dark Bronze
ADDITIONAL AGRONOMIC INFORMATION	Alternates high and low production years. Susceptible to stem and shoot hole borer and leaf anthracnose. The weight of its production can overwhelm the stems. Typically cultivated at 700 meters above sea level. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Congo group
LINEAGE	Unknown
BREEDER	Centre de Recherche Nestlé/INIFAP

INIFAP 97-15

Tall growth, tendency to form plants with more than three productive stems. Good yield potential, wide range of adaptation to the climatic conditions of the coast of Chiapas and Veracruz, Mexico.

YIELD POTENTIAL

Unknown/Desconocido- kg/ha

COUNTRY OF RELEASE

Mexico

CONTENTS OF MUCILAGE IN THE CHERRY

Low

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Unknown

COFFEE BERRY DISEASE

Not applicable

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY BORER

Susceptible

SUSCEPTIBLE RESISTANT

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Susceptible

SUSCEPTIBLE RESISTANT

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Unknown/Desconocido
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Dark Bronze
ADDITIONAL AGRONOMIC INFORMATION	Susceptible to coffee leaf rust, anthracnose, and coffee thread blight. However, it offers a good range of adaptation to different environments. Typically cultivated at 700 meters above sea level. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Guinea group
LINEAGE	Unknown
BREEDER	Centre de Recherche Nestlé/INIFAP

NARO-Kituza Robusta 1

Resistant to coffee wilt disease (CWD).

YIELD POTENTIAL

2800 kg/ha

COUNTRY OF RELEASE

Uganda

CONTENTS OF MUCILAGE IN THE CHERRY

Unknown

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Unknown
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	20%
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Green
ADDITIONAL AGRONOMIC INFORMATION	Resistant to wilt and red blister disease. 81 cupping score on the Specialty Coffee Association scale. Weight of green beans is 19-22g per 100 beans. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Uganda group
LINEAGE	Hybrid clone of natural cross-pollination
BREEDER	National Coffee Research Institute of Uganda (NACORI)

NARO-Kituza Robusta 10

Resistant to coffee wilt disease (CWD).

YIELD POTENTIAL

4800 kg/ha

COUNTRY OF RELEASE

Uganda

CONTENTS OF MUCILAGE IN THE CHERRY

Unknown

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Unknown
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	20%
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Green
ADDITIONAL AGRONOMIC INFORMATION	Resistant to wilt and red blister disease. 80 cupping score on the Specialty Coffee Association scale. Weight of green beans is 19-22g per 100 green beans. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Uganda group
LINEAGE	Hybrid clone of natural cross-pollination
BREEDER	National Coffee Research Institute of Uganda (NACORI)

NARO-Kituza Robusta 2

Resistant to coffee wilt disease (CWD).

YIELD POTENTIAL

2600 kg/ha

COUNTRY OF RELEASE

Uganda

CONTENTS OF MUCILAGE IN THE CHERRY

Unknown

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Unknown
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	20%
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Green
ADDITIONAL AGRONOMIC INFORMATION	Resistant to wilt and red blister disease. 82 cupping score on the Specialty Coffee Association scale. Weight of green beans is 18-22g per 100 green beans. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Uganda group
LINEAGE	Hybrid clone of natural cross-pollination
BREEDER	National Coffee Research Institute of Uganda (NACORI)

NARO-Kituza Robusta 3

Resistant to coffee wilt disease (CWD).

YIELD POTENTIAL

4900 kg/ha

COUNTRY OF RELEASE

Uganda

CONTENTS OF MUCILAGE IN THE CHERRY

Unknown

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Unknown
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	20%
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Green
ADDITIONAL AGRONOMIC INFORMATION	Resistant to wilt and red blister disease. 78 cupping score on the Specialty Coffee Association scale. Weight of green beans is 19-22g per 100 green beans. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Uganda group
LINEAGE	Hybrid clone of natural cross-pollination
BREEDER	National Coffee Research Institute of Uganda (NACORI)

NARO-Kituza Robusta 4

Resistant to coffee wilt disease (CWD).

YIELD POTENTIAL

2300 kg/ha

COUNTRY OF RELEASE

Uganda

CONTENTS OF MUCILAGE IN THE CHERRY

Unknown

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Unknown
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Early
CHERRY TO GREEN BEAN OUTTURN	20%
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Green
ADDITIONAL AGRONOMIC INFORMATION	Resistant to wilt and red blister disease. 81 cupping score on the Specialty Coffee Association scale. Weight of green beans is 16g per 100 green beans. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Uganda group
LINEAGE	Hybrid clone of natural cross-pollination
BREEDER	National Coffee Research Institute of Uganda (NACORI)

NARO-Kituza Robusta 5

Resistant to coffee wilt disease (CWD).

YIELD POTENTIAL

2860 kg/ha

COUNTRY OF RELEASE

Uganda

CONTENTS OF MUCILAGE IN THE CHERRY

Unknown

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Unknown
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	20%
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Green
ADDITIONAL AGRONOMIC INFORMATION	Resistant to wilt and red blister disease. 76 cupping score on the Specialty Coffee Association scale. Weight of green beans is 19-22g per 100 green beans. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Uganda group
LINEAGE	Hybrid clone of natural cross-pollination
BREEDER	National Coffee Research Institute of Uganda (NACORI)

NARO-Kituza Robusta 6

Resistant to coffee wilt disease (CWD).

YIELD POTENTIAL

2650 kg/ha

COUNTRY OF RELEASE

Uganda

CONTENTS OF MUCILAGE IN THE CHERRY

Unknown

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Unknown
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	20%
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Green
ADDITIONAL AGRONOMIC INFORMATION	Resistant to wilt and red blister disease. 70 cupping score on the Specialty Coffee Association scale. Weight of green beans is 19-22g per 100 green beans. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Uganda group
LINEAGE	Hybrid clone of natural cross-pollination
BREEDER	National Coffee Research Institute of Uganda (NACORI)

NARO-Kituza Robusta 7

Resistant to coffee wilt disease (CWD).

YIELD POTENTIAL

3000 kg/ha

COUNTRY OF RELEASE

Uganda

CONTENTS OF MUCILAGE IN THE CHERRY

Unknown

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Unknown
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	20%
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Green
ADDITIONAL AGRONOMIC INFORMATION	Resistant to wilt and red blister disease. 76 cupping score on the Specialty Coffee Association scale. Weight of green beans is 19-22g per 100 green beans. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Uganda group
LINEAGE	Hybrid clone of natural cross-pollination
BREEDER	National Coffee Research Institute of Uganda (NACORI)

NARO-Kituza Robusta 8

Resistant to coffee wilt disease (CWD).

YIELD POTENTIAL

3100 kg/ha

COUNTRY OF RELEASE

Uganda

CONTENTS OF MUCILAGE IN THE CHERRY

Unknown

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Unknown
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Early
CHERRY TO GREEN BEAN OUTTURN	20%
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Green
ADDITIONAL AGRONOMIC INFORMATION	Resistant to wilt and red blister disease. 79 cupping score on the Specialty Coffee Association scale. Weight of green beans is 19-22g per 100 green beans. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Uganda group
LINEAGE	Hybrid clone of natural cross-pollination
BREEDER	National Coffee Research Institute of Uganda (NACORI)

NARO-Kituza Robusta 9

Resistant to coffee wilt disease (CWD).

YIELD POTENTIAL

3900 kg/ha

COUNTRY OF RELEASE

Uganda

CONTENTS OF MUCILAGE IN THE CHERRY

Unknown

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Unknown
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	20%
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Green
ADDITIONAL AGRONOMIC INFORMATION	Resistant to wilt and red blister disease. 79 cupping score on the Specialty Coffee Association scale. Weight of green beans is 19-22g per 100 green beans. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Uganda group
LINEAGE	Hybrid clone of natural cross-pollination
BREEDER	National Coffee Research Institute of Uganda (NACORI)

Perdenia

Vigorous, wide-spreading, grow into moderately large trees. High-yielding, beans relatively small in size.

YIELD POTENTIAL

1500-3000 kg/ha

COUNTRY OF RELEASE

India

CONTENTS OF MUCILAGE IN THE CHERRY

Low

BEAN SIZE

Small (screen size 14 or below)

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE

Tolerant

SUSCEPTIBLE RESISTANT

COFFEE BERRY BORER

Susceptible

SUSCEPTIBLE RESISTANT

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Susceptible

SUSCEPTIBLE RESISTANT

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Year 4
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	25%
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Green or Bronze
ADDITIONAL AGRONOMIC INFORMATION	It can be grown at altitudes of 500 to 1000 meters above sea level. The bushes are spread out with 50–70 fruits per node in normal clusters, red in color with average cup quality. The fruit is relatively small in size. Yield of up to 1500 kg/ha under rainfed and shaded conditions and up to 2500 kg/ha under intensive cultivation practices including blossom and backing irrigation.

Background

TYPE	Clone
GENETIC DESCRIPTION	Congo group
LINEAGE	Unknown
BREEDER	Central Coffee Research Institute (CCRI), Coffee Board of India

Roubi 1

Combines excellent yield and cup quality. Very high acceptance among farmers.

YIELD POTENTIAL

Medium-High kg/ha

COUNTRY OF RELEASE

Mexico , The Philippines

CONTENTS OF MUCILAGE IN THE CHERRY

Unknown

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Not applicable
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Unknown
CHERRY TO GREEN BEAN OUTTURN	18-21%
LEAF TIP COLOR	Not applicable
ADDITIONAL AGRONOMIC INFORMATION	Plant with other clones for fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Unknown
LINEAGE	Unknown
BREEDER	Nestlé Research

Roubi 10

High productivity and high cup quality.

YIELD POTENTIAL

Medium-High kg/ha

COUNTRY OF RELEASE

Nicaragua

CONTENTS OF MUCILAGE IN THE CHERRY

Unknown

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Not applicable
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Unknown
CHERRY TO GREEN BEAN OUTTURN	18-21%
LEAF TIP COLOR	Not applicable
ADDITIONAL AGRONOMIC INFORMATION	Plant with other clones for fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Unknown
LINEAGE	Unknown
BREEDER	Nestlé Research

Roubi 2

Combines excellent yield and cup quality. Very high acceptance among farmers.

YIELD POTENTIAL

Medium-High kg/ha

COUNTRY OF RELEASE

Mexico , The Philippines

CONTENTS OF MUCILAGE IN THE CHERRY

Unknown

BEAN SIZE

Large (screen size >17)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Not applicable
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Unknown
CHERRY TO GREEN BEAN OUTTURN	18-21%
LEAF TIP COLOR	Not applicable
ADDITIONAL AGRONOMIC INFORMATION	Plant with other clones for fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Unknown
LINEAGE	Unknown
BREEDER	Nestlé Research

Roubi 4

High productivity in combination with large bean size.

YIELD POTENTIAL

Medium-High kg/ha

COUNTRY OF RELEASE

Thailand

CONTENTS OF MUCILAGE IN THE CHERRY

Unknown

BEAN SIZE

Large (screen size >17)

COFFEE LEAF RUST

Resistant

COFFEE BERRY DISEASE

Unknown

NEMATODE

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Not applicable
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Unknown
CHERRY TO GREEN BEAN OUTTURN	18-21%
LEAF TIP COLOR	Not applicable
ADDITIONAL AGRONOMIC INFORMATION	Plant with other clones for fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Unknown
LINEAGE	Unknown
BREEDER	Nestlé Research

Roubi 5

High produtivity in combination with large bean size.

YIELD POTENTIAL

Medium-High kg/ha

COUNTRY OF RELEASE

Thailand

CONTENTS OF MUCILAGE IN THE CHERRY

Unknown

BEAN SIZE

Large (screen size >17)

COFFEE LEAF RUST

Resistant

COFFEE BERRY DISEASE

Unknown

NEMATODE

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Not applicable
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Unknown
CHERRY TO GREEN BEAN OUTTURN	18-21%
LEAF TIP COLOR	Not applicable
ADDITIONAL AGRONOMIC INFORMATION	Plant with other clones for fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Unknown
LINEAGE	Unknown
BREEDER	Nestlé Research

Roubi 6

High productivity and high cup quality.

YIELD POTENTIAL

Medium-High kg/ha

COUNTRY OF RELEASE

Nicaragua

CONTENTS OF MUCILAGE IN THE CHERRY

Unknown

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Not applicable
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Unknown
CHERRY TO GREEN BEAN OUTTURN	18-21%
LEAF TIP COLOR	Not applicable
ADDITIONAL AGRONOMIC INFORMATION	Plant with other clones for fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Unknown
LINEAGE	Unknown
BREEDER	Nestlé Research

Roubi 7

Very good cup quality and high productivity.

YIELD POTENTIAL

Medium-High kg/ha

COUNTRY OF RELEASE

Nicaragua

CONTENTS OF MUCILAGE IN THE CHERRY

Unknown

BEAN SIZE

Small (screen size 14 or below)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Not applicable
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Unknown
CHERRY TO GREEN BEAN OUTTURN	18-21%
LEAF TIP COLOR	Not applicable
ADDITIONAL AGRONOMIC INFORMATION	Plant with other clones for fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Unknown
LINEAGE	Unknown
BREEDER	Nestlé Research

Roubi 8

High productivity and high cup quality.

YIELD POTENTIAL

Medium-High kg/ha

COUNTRY OF RELEASE

Nicaragua

CONTENTS OF MUCILAGE IN THE CHERRY

Unknown

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Not applicable
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Unknown
CHERRY TO GREEN BEAN OUTTURN	18-21%
LEAF TIP COLOR	Not applicable
ADDITIONAL AGRONOMIC INFORMATION	Plant with other clones for fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Unknown
LINEAGE	Unknown
BREEDER	Nestlé Research

Roubi 9

High productivity and high cup quality.

YIELD POTENTIAL

Medium-High kg/ha

COUNTRY OF RELEASE

Nicaragua

CONTENTS OF MUCILAGE IN THE CHERRY

Unknown

BEAN SIZE

Small (screen size 14 or below)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Not applicable
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Unknown
CHERRY TO GREEN BEAN OUTTURN	18-21%
LEAF TIP COLOR	Not applicable
ADDITIONAL AGRONOMIC INFORMATION	Plant with other clones for fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Unknown
LINEAGE	Unknown
BREEDER	Nestlé Research

SA 237

Suitable for cultivation under agroforestry systems in areas with dry climates.

YIELD POTENTIAL

800-2100 kg/ha

COUNTRY OF RELEASE

Indonesia

CONTENTS OF MUCILAGE IN THE CHERRY

Average

BEAN SIZE

Large (screen size >17)

COFFEE LEAF RUST

Resistant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Tolerant

SUSCEPTIBLE SUSCEPTIBLE

NEMATODE

Susceptible

SUSCEPTIBLE RESISTANT

COFFEE BERRY BORER

Susceptible

SUSCEPTIBLE RESISTANT

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	Unknown
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Light Bronze
ADDITIONAL AGRONOMIC INFORMATION	This clone is suitable for cultivation in dry climate areas and will perform best in the altitude range of 400–900 meters above sea level. This clone is susceptible to *Pratylenchus coffeae*. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Congo group
LINEAGE	The genetic composition of this clone is close to the 'R' group of robusta species.
BREEDER	Indonesian Coffee and Cocoa Research Institute (ICCRI)

Sln.1R

Plants that are very vigorous and grow into moderately large trees.

YIELD POTENTIAL

1500-3000 kg/ha

COUNTRY OF RELEASE

India

CONTENTS OF MUCILAGE IN THE CHERRY

Unknown

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE

Tolerant

SUSCEPTIBLE RESISTANT

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Tolerant

SUSCEPTIBLE RESISTANT

Agronomics

STATURE	Dwarf/Compact
YEAR OF FIRST PRODUCTION	Unknown
NUTRITION REQUIREMENT	Unknown
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	20%
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Green
ADDITIONAL AGRONOMIC INFORMATION	This variety is composed of two clones—S.270 and S.274—which are required to be planted together, because separate planting will reduce fruit sets.These two genotypes have recorded yields of nearly 1000 kg/ha on an average over 35 years of testing in rain-fed conditions. The planting density for this variety is 3m x 3m.

Background

TYPE	Polyclonal
GENETIC DESCRIPTION	Guinea x *Coffea congensis* group
LINEAGE	*Coffea congensis* x *Coffea canephora* and recurrent back cross to Robusta. Selection from BC2.
BREEDER	Central Coffee Research Institute (CCRI), Coffee Board of India

Sln.2R

Plants that are very vigorous and grow into moderately large trees and produce large beans.

YIELD POTENTIAL

1500-3000 kg/ha

COUNTRY OF RELEASE

India

CONTENTS OF MUCILAGE IN THE CHERRY

Unknown

BEAN SIZE

Large (screen size >17)

COFFEE LEAF RUST

Unknown

COFFEE BERRY DISEASE

Unknown

NEMATODE

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Unknown
YEAR OF FIRST PRODUCTION	Unknown
NUTRITION REQUIREMENT	Unknown
RIPENING OF FRUIT	Unknown
CHERRY TO GREEN BEAN OUTTURN	Unknown
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Unknown
ADDITIONAL AGRONOMIC INFORMATION	Many agronomic traits of Sln.2R, including yield potential, resemble Sln.1R. However, these clones have a higher stability for A-grade beans than the Sln.1R. This variety is composed of a mixture of three clones—BR 9, 10, and 11—which are required to be planted in mixtures, because separate planting will reduce fruit sets. Yield of up to 1,500 kg/ha in wet and shaded conditions and up to 2,500 kg/ha when managed carefully, including supplementary irrigation and flowering management.

Background

TYPE	Polyclonal
GENETIC DESCRIPTION	Guinea x Coffea congensis group
LINEAGE	*Coffea congensis* x *Coffea canephora*
BREEDER	Central Coffee Research Institute (CCRI), Coffee Board of India

Sln.3R

Compact plant stature with good yielding potential, suitable for high-density planting.

YIELD POTENTIAL

1500-2500 kg/ha

COUNTRY OF RELEASE

India

CONTENTS OF MUCILAGE IN THE CHERRY

High

BEAN SIZE

Large (screen size >17)

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Susceptible

SUSCEPTIBLE SUSCEPTIBLE

NEMATODE

Tolerant

SUSCEPTIBLE RESISTANT

COFFEE BERRY BORER

Susceptible

SUSCEPTIBLE RESISTANT

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Susceptible

SUSCEPTIBLE RESISTANT

Agronomics

STATURE	Dwarf/Compact
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	20%
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Light Bronze
ADDITIONAL AGRONOMIC INFORMATION	Relatively high water requirement for blossom and backing compared to other Robusta varieties. It is considered year-1 producing when using clones. If using seed, it will produce in year 2 and year 3, when cultivated under shade. Using irrigation can assist with early ripening. The planting density for this variety ranges from to 2.4m x 2.4m to 2.7m x 2.7m. Cultivated at altitudes of 500 to 1000 meters above sea level. Yield of up to 1500 kg/ha under rain-fed and shaded conditions and up to 2500 kg/ha under intensive cultivation practices including blossom & backing irrigation.

Background

TYPE	Polyclonal
GENETIC DESCRIPTION	Guinea x *Coffea congensis* group
LINEAGE	*Coffea congensis* x *Coffea canephora* and recurrent back cross to Robusta. Selection from BC2.
BREEDER	Central Coffee Research Institute (CCRI), Coffee Board of India

TR11

Very high yield and quality. Strong growth.

YIELD POTENTIAL

5000-6000 kg/ha

COUNTRY OF RELEASE

Vietnam

CONTENTS OF MUCILAGE IN THE CHERRY

Average

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Tall
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	24%
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Green
ADDITIONAL AGRONOMIC INFORMATION	Resistant to coffee leaf rust and high cup quality. The optimal altitude for production is around 500–800 meters above sea level. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Congo group
LINEAGE	Selection of mother tree from open-pollinated population in cultivation, vegetative multiplication by grafting
BREEDER	Western Highlands Agroforestry Science Institute (WASI)

TR4

High yield and wide adaptation to different environments.

YIELD POTENTIAL

5000-7000 kg/ha

COUNTRY OF RELEASE

Vietnam

CONTENTS OF MUCILAGE IN THE CHERRY

Low

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Dwarf/Compact
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	24%
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Green
ADDITIONAL AGRONOMIC INFORMATION	High and stable yield and quality. Strong secondary branching. The optimal altitude for production is around 500–800 meters above sea level. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Congo group
LINEAGE	Selection of mother tree from open-pollinated population in cultivation, vegetative multiplication by grafting
BREEDER	Western Highlands Agroforestry Science Institute (WASI)

TR9

Very high yield and cup quality, large bean size.

YIELD POTENTIAL

5000-6000 kg/ha

COUNTRY OF RELEASE

Vietnam

CONTENTS OF MUCILAGE IN THE CHERRY

Average

BEAN SIZE

Large (screen size >17)

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Dwarf/Compact
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	23%
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Dark Bronze
ADDITIONAL AGRONOMIC INFORMATION	Resistant to coffee leaf rust and high cup quality. The optimal altitude for production is around 500–800 meters above sea level. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Congo group
LINEAGE	Selection of mother tree from open-pollinated population in cultivation, vegetative multiplication by grafting
BREEDER	Western Highlands Agroforestry Science Institute (WASI)

TRS1

Wide adaptation to different environments; average input requirements.

YIELD POTENTIAL

4000-5000 kg/ha

COUNTRY OF RELEASE

Vietnam

CONTENTS OF MUCILAGE IN THE CHERRY

Average

BEAN SIZE

Medium (screen size 15-16)

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Dwarf/Compact
YEAR OF FIRST PRODUCTION	Year 3
NUTRITION REQUIREMENT	Medium
RIPENING OF FRUIT	Average
CHERRY TO GREEN BEAN OUTTURN	22%
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
ADDITIONAL AGRONOMIC INFORMATION	Because this plant is a polyclonal/synthetic variety (i.e., is composed of a combination of multiple unique types), plants will exhibit growth differences. Easy multiplication by seed. Good adaptation. Variety most commonly used by farmers. Optimal altitude for production is around 400–900 meters above sea level.

Background

TYPE	Polyclonal
GENETIC DESCRIPTION	Congo group
LINEAGE	Parent clones: TR4, TR9, TR11, TR12
BREEDER	Western Highlands Agroforestry Science Institute (WASI)

Xanh lun

Compact, very high yield. High-quality, relative drought tolerance, late to ripen.

YIELD POTENTIAL

5000-6000 kg/ha

COUNTRY OF RELEASE

Vietnam

CONTENTS OF MUCILAGE IN THE CHERRY

Average

BEAN SIZE

Large (screen size >17)

COFFEE LEAF RUST

Tolerant

SUSCEPTIBLE RESISTANT

COFFEE BERRY DISEASE

Unknown

NEMATODE (_MELOIDOGYNE EXIGUA, PRATYLENCHU...

Unknown

COFFEE BERRY BORER

Unknown

SHOOT HOLE BORER (*XYLOSANDUS COMPACTUS*)

Unknown

Agronomics

STATURE	Dwarf/Compact
YEAR OF FIRST PRODUCTION	Year 2
NUTRITION REQUIREMENT	High
RIPENING OF FRUIT	Late
CHERRY TO GREEN BEAN OUTTURN	23%
PLANTING DENSITY	1000-2000 plants/ha (using single-stem pruning)
LEAF TIP COLOR	Light Bronze
ADDITIONAL AGRONOMIC INFORMATION	Relatively drought tolerant. Presents low secondary branching in some regions. The optimal altitude for production is around 500-800 meters above sea level. Must be planted together with other clones to enable fruit set.

Background

TYPE	Clone
GENETIC DESCRIPTION	Congo group
LINEAGE	Selection of mother tree from open-pollinated population in cultivation, vegetative multiplication by grafting
BREEDER	Farmer selected, approved by Western Highlands Agroforestry Science Institute (WASI)

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