

# **COFFEE PROCESSING AND SOURCING TERMINOLOGY**

Ruby works tirelessly to source amazing coffees through strong partnerships with farmers, exporters, and importers. Through these amazing relationships, Ruby works to compile the best information from all three of those sources about each coffee through our bag labels, and our information sheets.

The limitation of space often gives us a chance to talk specifics about each coffee, but not enough room to dig into describing the details of coffee farming, coffee picking, and coffee processing terminology.

We hope this helps to decode some of the concepts and phrases that appear most often on our coffee bag labels and in our information sheets. It might not be the most comprehensive guide to coffee processing and sourcing, but it's definitely the only one that directly addresses the information categories on our labels.

# RUBY COLORFUL COFFEES"

#### TALNAMICA EL SALVADOR

dark chocolate dates lemon bar panna cotta

relationship: 5 years, partnered direct to farm farm type: family estate processing: fully washed, sun-dried region: Sonconst Department waristy: Bourbon elevation: 1400-1500 mesl

Roasted on:

06-03-19





### RELATIONSHIP

This section details who Ruby has the strongest connection to in the supply stream, and how that relationship has existed.

#### FARMER

A coffee farmer may have twelve trees in their back yard, or may own a large estate. Farmer refers to the owner of the coffee farm, and Ruby has direct sourcing ties to many farms and farmers where we collaborate on lot sourcing and negotiate prices directly. If the Farmer is Ruby's closest relationship, typically the exporter and importer involved in getting the coffee to Wisconsin play a more passive role.

#### IMPORTER

A coffee importer for Ruby is a company that brings coffee into the United States. There are a variety of models: Ruby has strong ties with multiple small, boutique style importers that work in coffee growing countries to help source new lots and connect them to buyers. If the Importer is Ruby's closest relationship, that means they have better communication established with the farmer and can best communicate needs and pricing information, letting the exporter play a more passive role.

#### EXPORTER

Until recently most coffee exporters were only focused on the logistics of getting coffee shipments to clear the port. Many new export companies, though, have begun to mirror the type of farm development practices that smaller import companies started: providing farmer education, access to capital, and connections to roasters directly. If the Exporter is Ruby's closest relationship, that means they have better communication established with the farmer and can best communicate needs and pricing information, letting the importer play a more passive role.





### FARM TYPE

This section details how each lot of coffee that Ruby buys was farmed.

#### ESTATE

An estate farm often has a few plots of land planted with coffee trees, and generally has it's own processing equipment on site. They can be small to large, with the defining factor generally being that the coffee is grown and processed on site. Some smaller estates may have their coffee processed at a local community mill.

#### COLLECTION OF SMALL FARMS

Sometimes, smaller farms will work collectively to bulk their coffee lots and have their coffee processed at a local wet mill facility together, either at a community owned facility or contracted for processing by a nearby wet mill. Usually, this group will have an association name and have leadership roles that help drive the development of the project.

#### CO-OPERATIVE

Most co-operatives operate by servicing either very small farms that often more closely resemble a personal garden of coffee trees. The co-op generally manages the wet mill, where the farmers drop off their ripe coffee cherry and get paid out on the spot. The co-op then goes on to finish processing the coffee, send it to the dry mill, and in some cases, create contact and relationships with roasters.





### PROCESSING

Processing refers to how the coffee seed is removed from the meat of the coffee cherry and the skin. The three main methods are washed, pulped-natural, and natural. Ruby rarely buys natural processed coffees.

#### WASHED PROCESS

Washed process coffee refers to the fact that once the skin and meat of the cherry have been removed from the seed, the coffee is fully rinsed in water to remove all lingering fruit residue. There are a few steps before the washing happens:

#### **DE-PULPING**

The first step is the removal of the skin and most of the sticky fruit mucilage that clings to the seed. This is accomplished via grinding discs, friction, or pressing the coffee through screens.

#### DRY FERMENTATION

After the coffee is de-pulped, the coffee will sit in an dry tank for 12-48 hours to allow any mucilage residue to begin to break down with an enzymatic process which allows for flavor development and easier removal during washing.

#### WET FERMENTATION

After de-pulping, the coffee will sit in a tank of water for 12-72 hours to allow fro any mucilage residue to begin to break down with an enzymatic process which allows for flavor development and easier removal during washing.





# PROCESSING, CONT.

#### QUALITIES OF A WASHED PROCESS COFFEE

There are a few consistent and tangible effects of a fully washed process on a coffee. Fully washed processes are designed to completely remove the skin and mucilage from the coffee seeds: this means a few things:

 The coffees will be more consistent with less potential defect from over-fermentation, mold, mildew, etc. if there's no excess fruit contact with the seed.
The coffees tend to have a "cleaner" flavor profile due to less fruit fermentation occurring in contact with the seed.

3. Physical defect, like chipped seeds, or malformed seeds, or insect damage are easier to see and to sort out of the lot.

4. Overall yields are high due to lack of spoilage that can be associated with other types of processing methods that involve more fruit fermentation.

Many specific steps in processing are developed to reflect regional norms, climate conditions, or traditional methods. Coffee in Ethiopia is often soaked a second time in a batch of water after being washed, as way to stabilize moisture content. Dry fermentation is sometimes used because water resources are scarce.

For this reason, applying specific flavor qualities to certain coffees by relating them to specific parts of the washed processing is difficult - isolating one step of washed processing in order to compare the differences in flavor is too difficult to do consistently.





## PROCESSING, CONT.

#### PULPED NATURAL PROCESS

Pulped Natural processing refers to coffees in which the skin and meat of the coffee cherry are removed, but the mucilage is left to dry on the seed. There are a variety of different styles of Pulped Natural Processing.

#### SEMI-WASHED

Coffees considered to be semi-washed generally have some level of water or rinsing involved in the de-pulping process. The goal is to remove as much mucilage as possible to mimic washed process coffees without fully soaking and washing them.

#### WHITE HONEY

Honey processing is a type of pulped natural processing that leaves an intentional amount of mucilage on the seed to dry and ferment. The coffee is piled up during this process, and the mucilage looks like a sticky coating of honey. White Honey is least amount of mucilage, so that the pale color of the coffee seeds shows through the sticky coating.

#### **RED HONEY**

Red Honey processing is a moderate amount of mucilage left on the seeds. The tint form the skin makes the sticky coating appear red as it's piled up.

BLACK HONEY

Black Honey processing is a method in which a large amount of mucilage is left on the seed. As it dries, it darkens, and starts to look black.





# PROCESSING, CONT.

#### QUALITIES OF A PULPED NATURAL PROCESS

Intentionally leaving mucilage on the seed to dry creates more fruit to undergo small amounts of fermentation. Semi-washed processing is often used more in instances of water scarcity, while honey process coffees are designed to affect the flavor of the coffee.

Depending on the amount of fruit left for fermentation, you can expect varying levels of more fruiter, fermented flavor in pulped-natural coffees. The big advantage is the removal of the skin and some mucilage to create a more even amount of mucilage to ferment: this creates more stability and consistency through processing.

Some issues with pulped-natural coffees are the risk of spoilage: more fruit left on the seed means more chances for over-fermentation which brings along those rotten fruit qualities, or other defects.

Honey Processing is also finicky, time consuming, and expensive. While it can lead to really interesting coffees, Ruby doesn't encourage producers to attempt new and experimental processing methods if there's a chance that they might be taking a risk with their yields.





### VARIETY

Different varieties of coffee trees have different traits: while it would be too large of an endeavor to try and list every coffee variety and their traits here, these are the traits that people look for in a coffee tree.

#### YIELD POTENTIAL

Heirloom coffee varieties are often low-yielding plants, so many newer hybrids are bred to produce more coffee cherry per tree.

#### FLAVOR/QUALITY

Some varieties of coffee trees have high potential for good quality and good flavors complexity. A lot of heirloom varieties are prized for their flavor characteristics.

#### DISEASE RESISTANCE

There are a few specific diseases that affect coffee plants. Newer hybrid varieties are often bred for natural disease resistance, while heirloom varieties tend to be more susceptible to disease.

#### TREE HEIGHT

Many coffee trees will naturally grow very tall, so newer hybrids are designed to be shorter trees to cut down on the amount of pruning required to keep coffee cherries within arms reach.

#### YEAR OF FIRST PRODUCTION

Many heirloom coffee varieties can take up to four years before they produce the first coffee cherries.





# ELEVATION

Elevation is a big factor in how coffee trees grow and how coffee cherries develop when said trees start to flower. 1000-1400 meters above sea level is considered low, 1400-1800 meters above sea level is considered high elevation. 1800-2200 meters is considered extremely high elevation. There are a number of factors to how elevation affects farming.

#### ATMOSPHERE

Higher elevations have a thinner atmosphere, meaning the plants struggle slightly more to produce fruit in a more limited exchange of oxygen with carbon dioxide.

#### TEMPERATURE

A thinner atmosphere at higher elevations creates a big day to night temperature shift. Cooler nighttime temperatures slow down the development of coffee cherries, meaning lower yields but higher concentration of sugars.

#### FUNGUS/PESTS/WEEDS

High elevations create difficult environments for pests, weeds, and fungi, leading to fewer chemicals being needed to protect coffee trees.

#### TREE HEIGHT

Higher elevations mean slower growing trees, so less pruning is required, and coffee cherries stay more readily within reach.

