

# Profitable INVESTING Tips

## Stock Market Investing Tips, Techniques, and Resources



## How Weather and Climate Affect Coffee Leaf Rust

By: [www.BuyOrganicCoffee.org](http://www.BuyOrganicCoffee.org)

Coffee leaf rust is a constant threat for crops everywhere in the world. This fungal plant disease is the reason that a country like Colombia grows about 80% of its coffee using resistant strains of Arabica and only 20% using non-resistant Arabica strains at much higher altitudes. It is generally accepted that coffee leaf rust is more of a problem at lower altitudes where temperatures are higher and less of a problem at higher altitudes where temperatures are lower. A problem in a coffee growing region like Colombia is that it is full of microclimates because of the extent of its mountainous terrain. Thus sorting out effects of climate versus effects of local weather on coffee leaf rust can be difficult.

### Fungal Plant Diseases and the Weather

There are more than nineteen thousand fungi causing crop infestations across the world. Many lie dormant until local environmental conditions trigger them. According to the US Department of Agriculture, between ten and twenty percent of agricultural production is lost every year due to fungal diseases. This is an issue of [food security](#). Because many fungi are beneficial, eradicating all fungi is not a good idea. Because [environmental speciation](#) is a major factor with fungal plant diseases, the problem commonly comes down to how the local farmer deals with the problem on their farm. In the western Andes in Colombia microclimates are the norm so that the relationship between fungal plant diseases and the weather varies from one area to the next even when separated by only a few kilometers.

### Climate Versus Weather and Coffee Leaf Rust in Colombia

Researchers from the University of Exeter looked at coffee leaf rust infestations in the coffee growing region of Colombia. They used [climate reanalysis data](#) to model coffee leaf rust risk. Specifically, they tested the hypothesis that the severe coffee leaf rust outbreak from 2008 to 2011 was related to climate changes instead of short term weather factors. Their model used leaf wetness duration and temperature as factors likely to make coffee leaf rust infestations worse. Their conclusion was that as far as the 2008 to 2011 leaf rust epidemic was concerned it was not related to climate changes. The best these folks could do was compare canopy wetness, temperature, and infection risk over the years. They admit that accurate on the ground measurements are difficult to obtain. What coffee farmers experience is that non-resistant strains do not do well at lower altitudes where temperatures are higher. This is why the fifth of Colombian coffee production by original Arabica non-resistant varieties is all at the highest altitudes.

Because local factors are so important with plant diseases like coffee leaf rust, more often than not the best judge of what coffee varieties to plant and how to handle an individual patch of land is commonly best handled by the coffee farmer whose family has probably farmed there for generations.

## Coffee Leaf Rust Prevention

A coffee farmer cannot control the weather but can plan based on local experience. Clearing away residue that encourage fungal growth is useful. There are also fungicides containing copper that are useful against coffee leaf rust. However, they need to be applied before an infestation to prevent it and not afterward to treat it. The copper tends to improve crop yields but is not a viable option if the coffee farmer wants to maintain organic coffee certification.

For more insights and useful information about organic coffee, visit [www.BuyOrganicCoffee.org](http://www.BuyOrganicCoffee.org).

# Educational Resources

**Click the links below to get your  
FREE training materials.**

## **Free Weekly Investing Webinars**

**Don't miss these free training events!**

<http://www.profitableinvestingtips.com/free-webinar>

## **Forex Conspiracy Report**

**Read every word of this report!**

<http://www.forexconspiracyreport.com>

## **Get 12 Free Japanese Candlestick Videos**

**Includes training for all 12 major candlestick signals.**

<http://www.candlestickforums.com>

**Disclaimer:** Trading and investing involves significant financial risk and is not suitable for everyone. No content on this document should be considered as financial, trading, or investing advice. All information is intended for educational purposes only.

