Sources and Scientific Support

The Truth about single-variety cacao

Why Criollo, Trinitario, and Forastero Are Not Varieties.

By Frank Homann, Founder and CEO of Xoco

· Cacao Biology and Genetics

1.Motamayor, J. C., et al. (2008). "Geographic and Genetic Population Differentiation of the Cacao (Theobroma cacao L.)" - This seminal study identifies the genetic populations of cacao and highlights that Criollo, Trinitario, and Forastero are broad genetic clusters rather than true varieties.

https://doi.org/10.1073/pnas.0808918105

2.ICCO (International Cocoa Organization). "The Biochemistry of Cacao Flavour."

https://www.icco.org

· Asexual Propagation and Uniformity

1. Wood, G. A. R., & Lass, R. A. (2001). "Cocoa." This textbook covers the propagation techniques essential for cacao cultivation.

2.Spiegel-Roy, P., & Alston, F. H. (2013). "Horticulture: Principles and Practices." It discusses propagation methods for fruit trees, including cacao.

· Flavour Potential and Processes

1.Schwan, R. F., & Wheals, A. E. (2004). "The Microbiology of Cocoa Fermentation and Its Role in Flavour Development."

2.Afoakwa, E. O. (2016). "Cocoa Production and Processing Technology." Provides insights into how processing expresses genetic flavour potential.

· Layman-Oriented Comparisons

1.Pollan, M. (2001). "The Botany of Desire." Offers analogies on human influence on fruit cultivation.

2.National Chocolate Foundation Articles: Public-friendly resources explaining cacao genetics and processing.

· Flavour vs. Genetics

1.Schwan, R. F., & Wheals, A. E. (2004). "The Microbiology of Cocoa Fermentation and Its Role in Flavour Development."

Explains that flavour potential arises from specific genetic traits rather than broad cluster classifications.

· Misconceptions in the Industry

ICCO (International Cocoa Organization). "Fine or Flavour Cocoa."

Discusses the overgeneralization of flavour quality in Criollo and Trinitario cacao.

https://www.icco.org

