

Abstract

Democratizing Coffee Genetics: Outcomes of the “Coffee Genetic Discovery” Project [†]

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Abstract: The genetic conformity of the cultivated varieties of coffee is key for the sustainability of coffee growing. In the past years, various studies have shown that genetic conformity was overall low. This situation is mainly due to a lack of professionalization in the coffee seed sector. However, this can impact the economic performance of growers who expect yield, disease resistance, and/or cup quality from their coffee plants. With the sponsorship of Lavazza, RD2 Vision has launched the “Coffee Genetic Discovery”. The aim of “Coffee Genetic Discovery” is twofold: to democratize the genetic analysis of cultivated coffee varieties and provide guidelines for improving the professionalization of the coffee seed sector. Coffee growers (*Coffea arabica* for this first edition) from 24 countries took part in a draw. One hundred winners benefited from a free genetic analysis of their favorite coffee plants. Each grower received the results individually. Most participants were from Central America and Mexico (50%), followed by Asia (23%) and then Africa (14%) and South America (13%). A total of 73% of the participants had an idea of what their cultivar was, while 27% had no idea. Most submitted samples were from the Core Ethiopian genetic group, which includes Geisha, Chiroso, and Sidra, showing the interest of farmers for cultivars with a high cup quality. Two thirds of the supposed cultivars were genetically conformed, while one third was not. This confirms the need for a more professional seed sector.

Keywords: cultivars; genetic diversity; coffee seed sector; DNA fingerprinting



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