PA191 Use of Physiological Analyzes to Evaluate the Quality of Different Genotypes Green Coffee to Different Altitudes.

Tosta, Murilo F.*, Rosa, Sttela D. V. F. *, Ribeiro, Diego E.*, Roque, Diego. J. O.*, Dias, Camila. A.*, Miranda, Felipe. M.* Borém, Flavio M. *

*Universidade Federal de Lavras - UFLA, Lavras, MG, Brazil.

Rationale

Coffee is strongly influenced by the environment along its development. During this period, various chemical compounds are formed or changed. Associated with these influences, the genotype favor getting coffee with better physiological qualities that are closely linked to sensory quality of the drink which in turn have been increasingly appreciated by the market. Thus, the present work aimed to evaluate the physiological quality of coffee Mantiqueira de Minas, collected in different environments and wet processing.

Methods

The experiment was conducted in a factorial (2x3) with 5 repetitions and two genotypes, Acaiá and Yellow Bourbon and three altitude ranges (less than 1,000 m, between 1,000 and 1,200 m and 1,200 m above) featuring the production environment. The harvest was manual, by selecting only ripe fruits, wet processed, and were then dried until reaching 11% water content (wb). Physiological analyzes were performed using the germination test. At 45 days after the beginning of the test was to count seedlings expanded cotyledons with.

Results

Open cotyledon leaves were not statically different at altitudes below 1200m compared the two genotypes. Above 1200m its the Bourbon genotype showed better results

Conclusions & Perspectives

The values were higher in cultivated coffees above 1200 m to the Bourbon genotype, indicating that the altitude is directly related to the quality of these coffees.

References

1. BORÉM, F. M. Pós-colheita do café. Lavras: UFLA, 2008. v. 1, p. 631.
2. BARBOSA,J.N.et al. Coffee quality and its interactions with environmental factors in Minas Gerais, Brazil. Journal of Agricultural Science, Cambridge, v.4, n. 5, p. 181-190, Jan. 2012.
3. JOET, T. et al. Influence of environmental factors, wet processing and their interactions on the biochemical composition of green arabica coffee beans. Food Chemistry, Oxford, v. 118, n. 3, p. 693-701, 2010.