Editorial

Coffee Quality: Cultivars, Blends, Processing, and Storage Impact

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Coffee is one of the most important agricultural products in the world, being produced in different countries and under several conditions, which leads to an enormous variety of beverages, according to cultivar selection, types of blends, processing technologies, and storage procedures, among other features. To spread and foment the discussion regarding these sources of variations to coffee drink among producers, industry, and consumers, some important issues must be addressed such as analysis of residues and micro-nutrients in coffee grain, emerging technologies like controlled fermentations, intercropping and solar radiation, methods of sensory analysis, and so on. In this special issue on coffee quality, we have invited a few papers that address such issues.

The first paper of this special issue aimed at quantifying the ash content and determining the concentration of heavy metals in roasted ground coffee. These parameters are important due to their persistency in the environment, becoming an indicator for coffee quality. The second paper presents the study on the yeast fermentation of green coffee beans, which consumers indicated that these coffees did not present negative aroma or flavor and presented higher antioxidant activity than coffee without fermentation. The third paper is on the influence of different distances of shading coffee trees on plant height, canopy diameter, plagiotropic branches' length, yield, coffee fruits' phenological

stage, ripe cherries' Brix degree, percentage of black, unripe, and insect damaged beans, bean size, and beverage quality. The best cup quality was obtained in coffee beans coming from coffee trees closer to shaded trees.

The fourth paper of this special issue analyzed the optimal number of Q-graders and R-graders on the sensory analysis consistency for specialty coffees. The authors indicated that the use of 6 tasters is sufficient to conduct sensorial analysis following SCA and BSCA protocol for coffees in the Arabica group, as well as 6 tasters for coil and Conilon coffees. Additional tasters did not improve the sensorial analysis. The fifth paper researched the influence of solar radiation and wet processing on the final quality of arabica coffee, being indicated that water fermentation and shaded region are more likely to provide coffee with higher grades. The final paper investigated, for two consecutive seasons, the effect of two different applications of boron, copper, and zinc over productivity and cup quality. Application via foliar spray presented better results than trunk injections, leading to higher productivity and cup quality.

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