Sensory Profiling and External Preference Mapping of Coffee Beverages with Different Levels of Defective Beans

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SUMMARY

The use of defective coffee beans in commercial blends is a common practice in Brazil. The objectives of the present study were to measure the sensory profile of coffee beverages prepared with the addition of different levels of defective beans to good quality beans, using a trained sensory panel and to investigate the consumer acceptance of the same samples, applying preference mapping analysis to address the relationship between descriptive and acceptance data. Three consumer segments were identified. Two consumer segments (67% of participants) preferred the good quality sample followed by the beverages with low level of defective coffee beans. Those samples were characterized by the trained panel as: sweet taste, characteristic aroma and flavour, and body. The third segment (33% of participants) preferred the beverages with high percentage of defects, which were described as bitter, chemical, green, burnt. Consumers in this segment did not like the good quality sample. The present results showed that although two thirds of the consumers were able to recognize and preferred good quality coffee, the remaining consumers preferred coffees containing high amounts of defective beans probably due to the acquired habit of consuming low cost/quality coffees available in the market.