Title Chemical attributes of defective coffee beans as affected by roasting

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Abstract

The present study aimed at an evaluation of the chemical composition of defective coffee beans. Significant differences were observed for ash contents of the coffee samples, with the highest values found for black beans. Non-defective coffee beans presented higher lipids contents than defective ones. After roasting, protein and ash contents remained approximately constant. There was a slight decrease in the oil content of non-defective beans, while the others remained relatively constant. Both black and sour beans presented higher acidity levels than immature and nondefective beans. Acidity levels decreased after roasting. Water activity levels did also decrease with roasting, with slightly higher levels for defective beans in comparison to non-defective ones. Sucrose levels were much higher for non-defective beans, and the lowest values were presented by black beans, prior to roasting. After roasting, only traces of sucrose were found.