POTASSIUM CONTENT IN DIFFERENT TYPES OF YERBA MATE (Ilex paraguariensis)


The yerba mate (Ilex paraguariensis) is the source of several inorganic compounds including potassium (K), an important mineral associated with muscle contractions. This study aimed to analyze the content of K in different types of yerba mate. Three different brands of three kinds of yerba mate were analyzed: traditional, coarse ground and mixed with herbs. The determination of K in all samples was obtained by optical spectroscopy. The techniques used were: digestion by acid etching, extracted with deionized water and infusion with hot water as it is usually consumed. It was observed that the values of K by acid etching on traditional were 1296 ± 91mg/100g, 1305 ± 36 mg/100g on coarse ground and 1390 ± 135mg/100g on mixed with herbs. The extractions did not follow the same ratio, resulting in 196.7 ± 24.1 mg/100g, 224.7 ± 23.6mg/100g and 221.9±1.8mg/100g of yerba mate traditional, coarse ground and mixed with herbs, respectively. In a single infusion it was observed that the content of K was higher on coarse ground, followed by traditional and mixed with herbs: 133±24mg, 69.6±13.8mg and 45.7± 2.1mg. It was concluded that yerba mate is rich in K in the acid etching and extraction procedures, but the levels of K in a single infusion are low. Nonetheless, it is important to highlight that the habitual consumption is not limited to a single infusion it is the sum of them that will make it a substantial source of K if compared to other substances with high levels of potassium.