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FLUORIDE CONTENT IN SOME TEA LEAVES AND TEA INFUSIONS

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Abstract

Fluoride content in some available teas, dry leaves and tea infusions were determined, in order to check the influence of brewing time on fluoride content in tea and to compare the percent extraction of fluoride releasing during tea infusion time. A fluoride ion selective electrode was used to determinate the fluoride content in tea samples (*Hypericum perforatum*, *Tilia cordata* and *Camellia sinensis*). Total fluoride contents of tea leaves were determined to be 91.1 - 162 mg/kg d.w., and 0.095-1.450 mg/L in tea infusions and the percentage of fluoride infused for analysed tea leaves ranged from 7.2% to 89.5%. The study shows that there are differences between the fluoride percentage in the tea infusions and about 85% of fluoride in tea leaves was released into *Hypericum perforatum* and *Camellia sinensis*, after 30 min of brewing. *Tilia cordata* shows a slow growth during the infusion process, having the lowest percentage of fluoride.

Key words: fluoride, infusions tea, ion-selective electrode, tea leaves

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