



The use of MP-AES for analysis major and micronutrients in soils

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The ICP with OES or MS detectors is today the most common multielement techniques for soil element analysis. Although the micro-plasma has been available for decades, there were no commercially available instruments on the market. The situation changed in 2011 when the Agilent 4100 MP-AES appeared. The use of nitrogen plasma of the MP-AES provides reduction in the operational and maintenance costs compared to ICP and therefore makes it very perspective for soil analysis.

The nitrogen microwave excited plasma has diferent properties compared to ICP argon plasma and this cause the specific behaviour of elements during the excitation.

Here we present the results and optimal instrumental parameters for determination of soil nutrients (K, Ca, Mg, Fe and Zn) by MP-AES.