



## **Metsulfuron methyl and glyphosate transport in soil columns of a Typical Argiudoll.**

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The objective was to evaluate the transport of Metsulfuron methyl and glyphosate in soil columns extracted from horizons A, B and C of a soil typical of Argiudolls.

The transport experiment was carried out under controlled temperature conditions in the laboratory. A pulse of glyphosate (corresponding to an annual dose of 5 kg i.a ha<sup>-1</sup>) and methyl methosulfuron (corresponding to an annual dose of 0.01 kg i.a ha<sup>-1</sup>) was applied to each column.

The concentration of both molecules was determined in the leachate and in the soil once the transport test was finished. Analytical determinations were carried out in UPLC MS / MS (Waters).

The cumulative concentration of both molecules was higher in the leached solution of the subsurface horizons (B and C). The general, metsulfuron methyl has less affinity for the solid matrix than glyphosate. Our study indicates, preliminarily, that both molecules are transported by water through the soil profile and can affect the quality of groundwater.