

**Degradation of 2,4-dichlorophenoxyacetic acid by  
electro-Fenton process at low flow plant**

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This study evaluates the electro-Fenton decontamination of wastewater containing a highly polluted of one common herbicide partially dissolved. The solution was composed by the commercial formulation Hierbamina® (479.5 g/L 2,4-dichlorophenoxyacetic acid, 2,4-D), as is commonly dosed in Mexico. All electro-Fenton experiments were performed using a 3 L flow plant with a boron-doped diamond (BDD)/BDD cell operating at constant current density, ambient temperature and liquid flow rate of 7 and 10 L min<sup>-1</sup> employed for on-site hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>) production in an acidic medium (pH 3) to promote Electro-Fenton treatment. The 2,4-D decay always follows a pseudo-first-order kinetics evaluated as total organic carbon (COT) abatement.