

L'etude de la reversibilite des systemes redox du paraquat dans la voltamperometrie cyclique

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The present study is a part of a research serial concerning the interaction between paraquat – the active component of the herbicide Gramoxone – and the plant enzymes. This work is studying the solvent influence on the reversibility of paraquat's redox systems, using the cyclic voltamperometry. Also the influence of the scan rate has been studied. The analytical conditions must be as similar as possible with the plant biological medium, but at the same time, the adsorption on the electrode must be minimal. We made the study on three different electrodes: Au, Pt and C. The best reversibility of the systems was obtained for a solvent containing phosphate buffer pH 7 / DMSO (10 ml / 4,5 ml). The scan rate is also influencing the system's reversibility, depending of the electrode's nature.