

# Electrochemical study of the hallucinogen ( $\pm$ )-1-(2,5-Dimethoxy-4-nitrophenyl)-2-aminopropane

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An electrochemical study of the hallucinogen ( $\pm$ )-1-(2,5-dimethoxy-4-nitrophenyl)-2-aminopropane, which differs from similar compounds in that a hydrophilic nitro group replaces hydrophobic substituents on the 4-position of the benzene ring, was carried out using a solvent - buffer system containing pyridine - formic acid and tetramethylammonium chloride solution. Polarographically and voltammetrically the drug behaves as other structurally related aromatic nitro derivatives, the nitro group being reduced to the hydroxylamine in a single, well defined irreversible, diffusion-controlled and pH-dependent wave. The  $E_{1/2}$  versus pH and  $i_{lim}$  versus pH relationships were examined and cyclic voltammograms were recorded at different pH values and at different scan rates in order to elucidate the reduction mechanism and to identify relatively unstable intermediate species. The results of this study suggest that a significant relationship can be established between the elect