

Journal of Engineering and Applied Science, Vol. 42, No.1.pp. 99-109.1995.

Hydraulic jump for efficient mixing of fertilizers in rectangular irrigation ditches: Design Methodology.

A.S. EL-Zaher and M.S. Hassen.

Abstract : The use of hydraulic jump for mixing of liquid fertilizers with irrigation water is proposed. Analysis of free hydraulic jump has been carried out to determine the factors that should be considered for efficient mixing. Based on such analysis, a rational methodology and nomographs have been presented for handy design of free hydraulic jump. Experimental investigation was carried out to verify the proposed method and satisfactory results were obtained.