COMMUNICATION NETWORK IN MIMOSA PUDICA

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ABSTRACT

Demonstration and mapping of communication networks in Mimosa Pudica Plant have important implications for Neuro-botany. For the first time, it is proposed that loss of electric charge is utilized as a signaling mechanism in Mimosa pudica. It runs contrary to the popular theory of generation of action potential giving rise to rapid drooping of leaves and folding of leaflets. Loss of electric charge leads to opening of hundreds of ion channels giving rise to rapid drooping of leaves and folding of leaflets. It is fundamentally different than the use of action potential in the animal kingdom. Present study constructs communication network in the plant using various stimuli. A rapid, widespread network of communication has been observed.

KEYWORDS: Electric Charge, Mimosa Pudica, Communication Network & Phospholipids

Received: Dec 11, 2017; Accepted: Dec 30, 2017; Published: Jan 10, 2018; Paper Id.: IJBRFEB20181