

EM treatment effects on water transport in a plant: explanatory challenges

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I will describe an experiment (<http://www.waterjournal.org/volume-8/holster>) that shows that, under certain conditions, RF water treatment strongly enhances water transport in plants. Effects were detected by comparing recovery times of wilted flowers re-hydrated in RF treated water versus untreated water. I will then discuss the challenge of explaining the effects at a fundamental level. Effects of low-energy EM interactions with water are baffling to conventional water science, and part of a wider group of surprising phenomena related to EM properties of water. New explanations have crystallised in the past decade, through alternative theories (such as Pollack's Exclusion Zone theory), combined with detailed experimental verifications of complex water structures. However no detailed explanation of RF water treatment seems to be known. I will suggest an explanation can be pursued in two parts. The first concerns the EM-water interaction, and tries to answer these questions: *What happens in the RF interaction with the water? What is the energy source driving the change of water state? How does the water store the EM energy?* The second concerns the subsequent water transport process itself: *How does the altered water state enhance water transport in a plant? How does it affect osmosis and capillary processes?*