

Will Microorganisms be the Sustainable Future of Agriculture?

Eric Durnford

Abstract:

Humanity and agriculture have an intimately woven relationship. We transitioned from perpetually moving nomadic units to geographically anchored agrarian societies. Soil has been the foundation of our success as a species. Our rapidly growing global population is beginning to strain the capabilities of soil. Every year there are more mouths to feed and, relatively, the same amount of arable land to feed them. According to the Food and Agriculture Organization (FAO), agricultural production will have to rise by 70% to meet the projected food demand by 2050. Without the ability to create new arable land, farmers will have to produce higher yields to meet the demand. How do we increase yields? We are realizing that the conventional pathway involving the use of chemical based fertilizers won't sustain us forever. In this poster presentation we will examine the emergence of biological fertilizers and microbially enhanced crop amendments, and determine their value in global agriculture.

Biography:

Eric Durnford is an Account Manager at Nurture Growth Bio-Fertilizer. He has a BSc from the University of Toronto. He has worked extensively in the green roof industry and is now in the agricultural field discovering sustainable alternatives to common problems.

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