2. Beneficial Effects of Rhizobacteria

Sustainable agriculture is essential today's world to fulfill the agriculture need and future food security. Since our tradition agriculture method is unable to do so because of various concerns. We have an urgent need to develop sustainable and effective mechanism to do same. Sustainable agriculture has potential to meet our agriculture need that our convention methods were unable to do so. This types of agriculture practice use special farming technique wherein environmental resource fully utilized without compromising it. Biological methods, a component of special forming may be an important alternative to replenish gap created by traditional method. This type of agriculture is beneficial, and they use natural resources without harming future generation. Diversity of dense population of microbes including bacteria, fungi, and Actinomycetes colonizes the root of plants. These microorganisms are group of naturally occurring beneficial microbe applied as inoculant to enhance plant growth and development (Ahmad et al. 2008) 9 . These groups of microbes have several properties which attract modern scientist and policy makers. In addition, these microbial communities improve soil quality, soil health and crop quality. Organic matters, in form of root exudate, attract numerous microbes and habitat for variety of microbes. Rhizobacteria in response to root exudates by chemotactic mechanism and competent rhizobacteria reside the rhizospheric zone of plant root. Some microbes reside in close vicinity with plants and communicate through different method (Singh et al. 2011) 10. The communication occurs at molecular level through particular signaling molecule. Depending on compatibility of plant and microbes, it may for root nodules which provide favorable condition for microbes to fix atmospheric molecular nitrogen (Masciarelli et al.

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