

FOLIAR FERTILIZER AND CROP PRODUCTION: A REVIEW

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Recently, the production and marketing of foliar fertilizers has increased. This is owed to foliar fertilization ability to enhance crop yield and quality. The main aim of this work is to give a comprehensive review about the negative and positive sides of foliar fertilization. Scientifically, foliar fertilization has many positive sides, such as, friendliness to environment, rapid supply of nutrients to crops at critical stages and faster correction of deficiency symptoms. Besides, balanced plant nutrition with micro nutrients has been more possible through use of blended foliar fertilizers. Effectiveness of foliar fertilizers depends on whether they are used solely or in combination with soil application keeping other factors constant. Majority of the research indicate that foliar fertilization shouldn't be used as substitute for soil fertilization but as a compliment. On the contrary, some reports have indicated that foliar fertilization alone can enhance productivity of crops provided the right formulation and amount is applied at the most critical stages of the plant. In both situations, understanding foliar nutrient uptake pathways and processes is critical in optimizing nutrient use efficiency by crops and preventing the negative effects of inappropriate nutrient or fertilizer formulations and application rates. With concern of environmental pollution caused by over pumping of soil with fertilizers, more specific studies need to be conducted to find sustainable ways of increasing foliar application with minimal soil fertilization to enhance crop productivity.