

Abstract

Patent Landscape Analysis of Seaweed-Based Biofertilizers [†]Ahmed Fatimi ^{1,2} 

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Abstract: Seaweed-based biofertilizers for agriculture are developing rapidly through the innovation and improvement of used raw materials, formulations, methods, and processes. This is also evident from the increase in the number of patent applications filed each year in this area of seaweed-based biofertilizer research and development. Therefore, this work in the form of patent analysis encapsulates information which could be used as a reference by researchers in the fields of agriculture and plants, as well as those interested especially in biofertilizers. The state has been reviewed by introducing what has been patented concerning seaweed-based biofertilizers. The patent classification codes reveal that most inventions intended for soil conditioners and the preparation of fertilizers are characterized by biological or biochemical treatment steps, as well as organic fertilizers containing added bacterial cultures. The knowledge clusters and expert driving factors of this patent analysis indicate that the research and development are based on the formulation, method of production, and processes for preparation, as well as devices and apparatus for the manufacturing of biofertilizers that are concentrated in most patents.

Keywords: agriculture; seaweed; biofertilizers; chemistry; patent data; innovation



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