

Patent Landscape Analysis of Seaweed-Based Biofertilizers [†]

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[†] Presented at the 1st International Online Conference on Agriculture—Advances in Agricultural Science and Technology (IOCAG 2022), 10–25 February 2022; Available online: <https://iocag2022.sciforum.net/>.

Abstract: Seaweed-based biofertilizers for agriculture are developing rapidly through the innovation and improvement of used raw materials, formulations, methods, and processes. This is evident also 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 for production, and processes for preparing, as well as devices and apparatus for manufacturing of biofertilizers that are concentrated in most patents.

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

Citation: Fatimi, A. Patent Landscape Analysis of Seaweed-Based Biofertilizers. *2022*, *4*, x. *Chem. Proc.* <https://doi.org/10.3390/xxxxx>

Academic Editor(s):

Published: date

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