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(54) **Title:** PLANT FERTILIZER COMPOSITION AND METHOD OF MAKING SAME

(57) **Abstract:** The present invention provides, in some embodiments, a plant fertilizing composition and a method of producing the plant fertilizer. Other embodiments of the invention provide natural, organic, non-pathogenic enzymes for soil and water immobilization and microencapsulated bacterial enzymatic complexes. Various embodiments of the invention are particularly suited for use in agriculture to increase the health and yield of crop plants. In other embodiments, the composition may be utilized to reduce waterborne contamination.

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<p>A. CLASSIFICATION OF SUBJECT MATTER IPC(8) - C05F 1/00; C05F 15/00 (2009.01) USPC - 71/16, 23 According to International Patent Classification (IPC) or to both national classification and IPC</p>																				
<p>B. FIELDS SEARCHED</p> <p>Minimum documentation searched (classification system followed by classification symbols) USPC: 71/16, 23</p> <p>Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched</p> <p>Electronic data base consulted during the international search (name of data base and, where practicable, search terms used) Electronic Databases Searched: USPTO WEST (PGPUB, EPAB, JPAB, USPT), Google Patent, Google scholar. Search Terms Used: fertilizer, fish, seaweed, ground, kombu, cottonii, nori, wakame, microorganism, damselfish, indiana sea, rhizobium or Bradyrhizobium japonicum or Actinomyces humiferus or Frankia or Micrococcus luteus</p>																				
<p>C. DOCUMENTS CONSIDERED TO BE RELEVANT</p> <table border="1"> <thead> <tr> <th>Category*</th> <th>Citation of document, with indication, where appropriate, of the relevant passages</th> <th>Relevant to claim No.</th> </tr> </thead> <tbody> <tr> <td>Y</td> <td>US 4,975,106 A (Ferguson) 04 December 1990 (04.12.1990) entire document especially figure 1; table 3; abstract; col 2, ln 08-11; col 6, ln 19-48; col 2, ln 12-15; col 2, ln 44-46; col 7, ln 46-53; col 5, ln 28-30</td> <td>1-17</td> </tr> <tr> <td>Y</td> <td>US 4,996,062 A (Lehtonen et al.) 26 February 1991 (26.02.1991) especially col 1, ln 52-67</td> <td>1-17</td> </tr> <tr> <td>Y</td> <td>US 6,444,448 B1 (Wheatcraft et al.) 03 September 2002 (03.09.2002) especialluy</td> <td>11, 16</td> </tr> <tr> <td>A</td> <td>US 5,634,959 A (Beaty) 03 June 1997 (03.06.1997) entire document</td> <td>1-17</td> </tr> <tr> <td>A</td> <td>US 4,043,788 A (Fryer) 23 August 1977 (23.08.1997) entire document of 6, ln 56-6</td> <td>1-17</td> </tr> </tbody> </table>			Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.	Y	US 4,975,106 A (Ferguson) 04 December 1990 (04.12.1990) entire document especially figure 1; table 3; abstract; col 2, ln 08-11; col 6, ln 19-48; col 2, ln 12-15; col 2, ln 44-46; col 7, ln 46-53; col 5, ln 28-30	1-17	Y	US 4,996,062 A (Lehtonen et al.) 26 February 1991 (26.02.1991) especially col 1, ln 52-67	1-17	Y	US 6,444,448 B1 (Wheatcraft et al.) 03 September 2002 (03.09.2002) especialluy	11, 16	A	US 5,634,959 A (Beaty) 03 June 1997 (03.06.1997) entire document	1-17	A	US 4,043,788 A (Fryer) 23 August 1977 (23.08.1997) entire document of 6, ln 56-6	1-17
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<p>Name and mailing address of the ISA/US Mail Stop PCT, Attn: ISA/US, Commissioner for Patents P.O. Box 1450, Alexandria, Virginia 22313-1450 Facsimile No. 571-273-3201</p>		<p>Authorized officer: Lee W. Young PCT Helpdesk: 571-272-4300 PCT OSP: 571-272-7774</p>																		