

Liquid Organic Fertilizer

Claim:

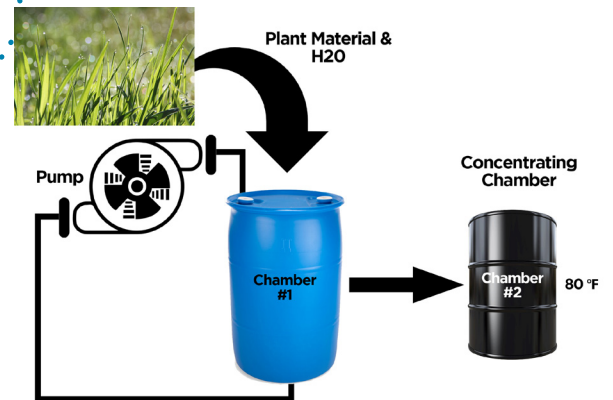
The technology described here is a method and apparatus to produce liquid organic fertilizer from plant material by using a two-phase process. The first phase uses a continuous extraction process where liquid leachate (water solution with bacteria) is repeatedly filled and drained from a storage container until the process of chemical decomposition is over. It takes approximately fourteen days to complete the first stage. The second phase consists of an accelerated bio-leaching process where plant material is drained from the first container to a second container and heated at 80 °F in order to concentrate the nutrients of the leachate into a transportable organic liquid fertilizer.

Novelty:

- **No Chemical Contamination** - The risk of chemical contamination of the organic crop is completely eliminated because the liquid fertilizer is produced without the use of any chemicals.
- **Ease of Application** - the liquid fertilizer can be easily applied to the plant through the irrigation system or sprayed on the forage.
- **More Value per Gallon** - The concentrated liquid fertilizer can efficiently be diluted in water to get more value per gallon.
- **Soil Salinity** - Increased plant growth due to better absorption of nutrients by the plant from liquid fertilizers even in saline soil.

Technology Applications:

Organic farming is a very rapidly growing segment of agriculture. The organic concentrated liquid fertilizer produced using the said technology is a reliable source of nutrients for organic vegetables, fruits, and other crops. Because the fertilizer is produced without the use of any chemicals, the risk of chemical contamination of the fertilizer and the food products nourished by it is completely eliminated. Further, because it is produced as a liquid, the concentrated fertilizer can be diluted in water and can be easily applied through the irrigation system or sprayed on the forage.



Inventor(s) Expertise

Dr. Zohrab A. Samani

Professor, Civil Engineering Department
New Mexico State University

Property of Arrowhead Center.
Do not duplicate/distribute.

For more information please contact:
Terry Lombard at 575.646.2791 or
tlombard@nmsu.edu



ARROWHEAD CENTER®

