

Sewage sludge down on the farm

June 7 2019, by David Bradley



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The phrase "sewage farm" may have fallen from favour and been replaced with terms such as waste water treatment works and the like. But, the origin of that archaic phrase refers very directly to the fact that partly processed human waste was at one time commonly used as agriculture fertiliser on farmland close to such a treatment works.

Majeed Ali, Talaat Ahmed and Mohammad A. Al-Ghouti of the Department of Biological and Environmental Sciences, at Qatar University, in Doha, Qatar, discuss the modern potential for using [sewage sludge](#) on soil and plants in the *International Journal of Environment and Waste Management*. The team emphasizes that in their review of approaches to the use of sewage they have found great variation in how the material is used and how much pre-treatment is carried out.

"The fertiliser potential and pollutant risk for applied sewage sludge in [agricultural activities](#) must be specifically evaluated for each sludge due to the fact that there is variation in the characteristics of sludges in which they undergo different treatment levels, in addition to the differences in the pollutant nature that is found in the wastewater," the team writes.

Whereas the old-fashioned sewage farm may have been able to use simply treated raw sewage in an essentially small and closed community. In the modern world of much greater personal mobility and exposure to a wide range of pathogens and pollution from around the world, it is essential that sewage sludge be adequately treated before it can be used as fertilizer. This must be done to eliminate and remove any harmful materials that can negatively affect the environment, human health, soil, and the crops grown with the help of that sludge. The team suggests that there are several viable ways to adequately treat sewage sludge, namely aerobic, anaerobic digestion, and thermal treatment.

More information: Majeed Ali et al. Potential benefits and risk assessments of using sewage sludge on soil and plants: a review, *International Journal of Environment and Waste Management* (2019). [DOI: 10.1504/IJEW.2019.099992](https://doi.org/10.1504/IJEW.2019.099992)

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