A Study on the Effectiveness and Use of Freshwater Snail Waste in the Production of Agricultural Materials

Ahn, Dongjun (School: Wheeling Park High School)

Choi, Yeon Soo (School: Jefferson High School)

Jang, Sooyeon (School: Dominican Convent High School)

Due to the spread of eco-friendly farming methods using freshwater snail, the amount of freshwater snail waste produced on farms has increased to 6,500 tons per year. This increase is causing new problems for farmers, such as water pollution and bad odors. In this study, snail waste was converted into an eco-friendly fermented fertilizer and livestock feed. We analyzed the components of the fertilizer (N, P, K) and tested it to verify its efficacy as a fertilizer. This study not only solves the problem of treating the new excess of snail waste, but also converts waste into economical fertilizers and livestock feeds to solve environmental pollution problems and reduce the use of chemical fertilizers. This study will have a ripple effect on the farming industry because it can be applied not only to local snail farmers, but also to snail farmers around the world.