Science Societies

‘Humanure’ is effective compost for lettuce growth

May 15, 2025

Ph.D. researcher Katie Allen alongside a lettuce that was grown in human poop compost. Photo by Katie Allen.

Composted human feces—known as "humanure"—is a simple, low-cost way to recycle waste into a valuable organic material for growing food. While previous work has looked into using humanure as a soil improver, its potential as a potting mix had not been explored until now. Rather than flushing it away, can we turn poop into something useful?

That was the question at the heart of a research project from the University of Leeds, results of which were recently published in *Urban Agriculture and Regional Food Systems*. The study tested four humanure blends as potting mixes for lettuce (*Lactuca sativa*) seedlings, comparing them with commercial potting mix and garden soils. The results were promising: three of the humanure blends performed just as well as the commercial mix in terms of emergence and seedling growth. The fourth, which was less well matured than the others, showed slower growth, but still supported good seedling emergence. In contrast, garden soils performed much worse.

This research reveals that humanure is not only a sustainable way to manage waste but could also provide an affordable, eco-friendly alternative to peat-based potting mixes. With proper composting techniques, humanure could become a game-changer for home gardeners and horticulture, reducing reliance on commercial compost while promoting a more circular economy.

Dig deeper

Allen, K., Papargyropoulou, E., Wade, R., & Evans, B. (2025). Evaluating the performance of humanure as a potting mix for lettuce (*Lactuca sativa*) seedlings. *Urban Agriculture & Regional Food Systems*, *10*, e70010. https://doi.org/10.1002/uar2.70010
