Innovative Indoor Biowaste Composting Solution: Biobox with Added Microorganisms and Heating Source

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Landfilling of biowaste instead of composting or recycling it is a major problem for many countries around the world. Even in regions where recycling is common it is not available to everybody. To combat this problem and allow for composting in a home environment we constructed, tested and got user feedback about a biobox that is able to compost the biowaste of an average family. The working solution includes a heating system, insulation and added microorganisms to produce high quality humus quickly and without unpleasant odors or hazardous substances. The laboratory study included experiments under different controlled conditions; the subsequent user survey measured the satisfaction levels of different end users of our biobox and humus. Both the experiment phase as well as the survey produced satisfactory results and indicated that producing humus indoor is possible and viable; it is also about ten times faster than the process of producing humus with no added microorganisms or an outside heating source.

Awards Won: