

Smart pulverizer machine

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Abstract

Waste is a global issue. Food waste is an extremely serious environmental issue, and pollution of air and water is caused because of improperly discarded food. Most nations lack effective ways to dispose food waste. Producing compost using food waste is an accepted option to use as a proper disposal method. In such systems, long processing times, high costs, and lack of odor removal methods are some issues. A Smart pulverizer machine is developed as a solution to overcome such issues. The main objective is to use waste food to produce organic fertilizer. An Arduino is used to operate the device. Five main functions, mainly, food waste crushing, heating, foot operated lid control, odor filtering, and output removal are available in the product. As a safety measure, an overload prevention system is included. As a result, 1 kilogram of food waste pulverized within 90 minutes as an organic fertilizer. Domestic food waste collected at garbage dumps can be greatly reduced by using this equipment.

Keywords: *Pulverizer, food waste, crushing, fertilizer*