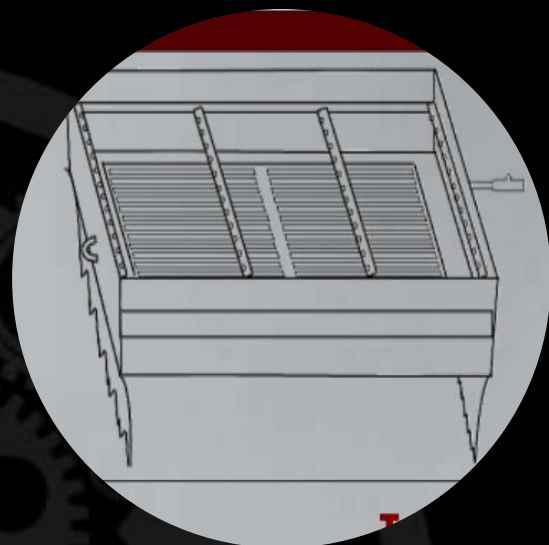


TECH BRIEF

Black Soldier Fly Larvae Harvesting Unit and Method of Harvesting thereof



Technical Problem: Unavailability of a model, that capable of separating insect material and harvesting a specific stage of Black Soldier Fly Larvae. The solution is combined (insect material separation, refining of a specific larval stage) BSFL harvester capable of harvesting a demanded larval stage.

Inventiveness: This invention intends to develop a combined Black Soldier Fly (*Hermetia illucens*) Larvae extraction and harvesting unit. This invention accounts for the separation of larvae from residues and harvesting of a specific larval stage. Due to difficulty in harvesting process, at present prepupal stage is widely used for the operations. Hence, this invention supports extraction and refining of larvae matched with the demanded size, unit is capable of using for occasions where multiple larval stages grow together. Crafting is accomplished by using water proof plastic materials, PVC pipes and rubber linings. Refining section is a set of sieves with adjustable mesh size and continuous reciprocal movements. Water spraying mechanism is a perforated PVC tubing system running throughout the harvester body.

Value Propositions: Black Soldier Fly Larvae seems to be a prominent protein source in animal diets. As a result, nowadays there is an increasing demand for farming of Black Soldier Fly Larvae (BSFL) throughout the world. Therefore, many models have been developed in order to facilitate the whole life cycle of Black Soldier Fly. However, growing of Black Soldier Fly Larvae inside man made models tend towards few issues. Separation of a demanded larval stage is one of the major issues faced during the harvesting of BSFL from the culture or feeding device.

Therefore, it is necessary to develop a model with following specifications to fill the gap. Harvester should facilitate the separation of larvae as demanded by the user. Unit should be compatible and minimal labor involvement.

Market Applications: It can be used as a harvesting tool for commercial harvesting of a desired BSFL stage in small, medium, and large-scale BSFL farming.