

Title: Oyster Mushroom Layer-By-Layer Plantation Machine

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Oyster mushrooms, prized for their taste and nutritional benefits, have become a lucrative income source. Traditionally foraged from forests, these mushrooms were seasonal, limiting availability. The recent surge in demand, driven by health-conscious diets, recognizes mushrooms as a potential staple due to their high digestibility and protein content.

Oyster mushrooms stand out as a rare source of Vitamin D, offering both nutritional security and income opportunities for rural youth and women in tribal communities. The northeast's ideal climate and abundant paddy straw make it a prime location for oyster mushroom cultivation.

However, traditional cultivation methods, particularly manual compression of straw-spawn mixtures, are laborious and time-consuming, deterring potential farmers. To address this, innovative machinery has been developed to simplify the layer-by-layer planting process. This machine efficiently compacts straw and mushroom spawn in a controlled chamber within a polybag, significantly reducing labour intensity and time. The completed polybag can be easily discharged, streamlining the entire cultivation process. For detailed information on this innovative design, refer to the following description.

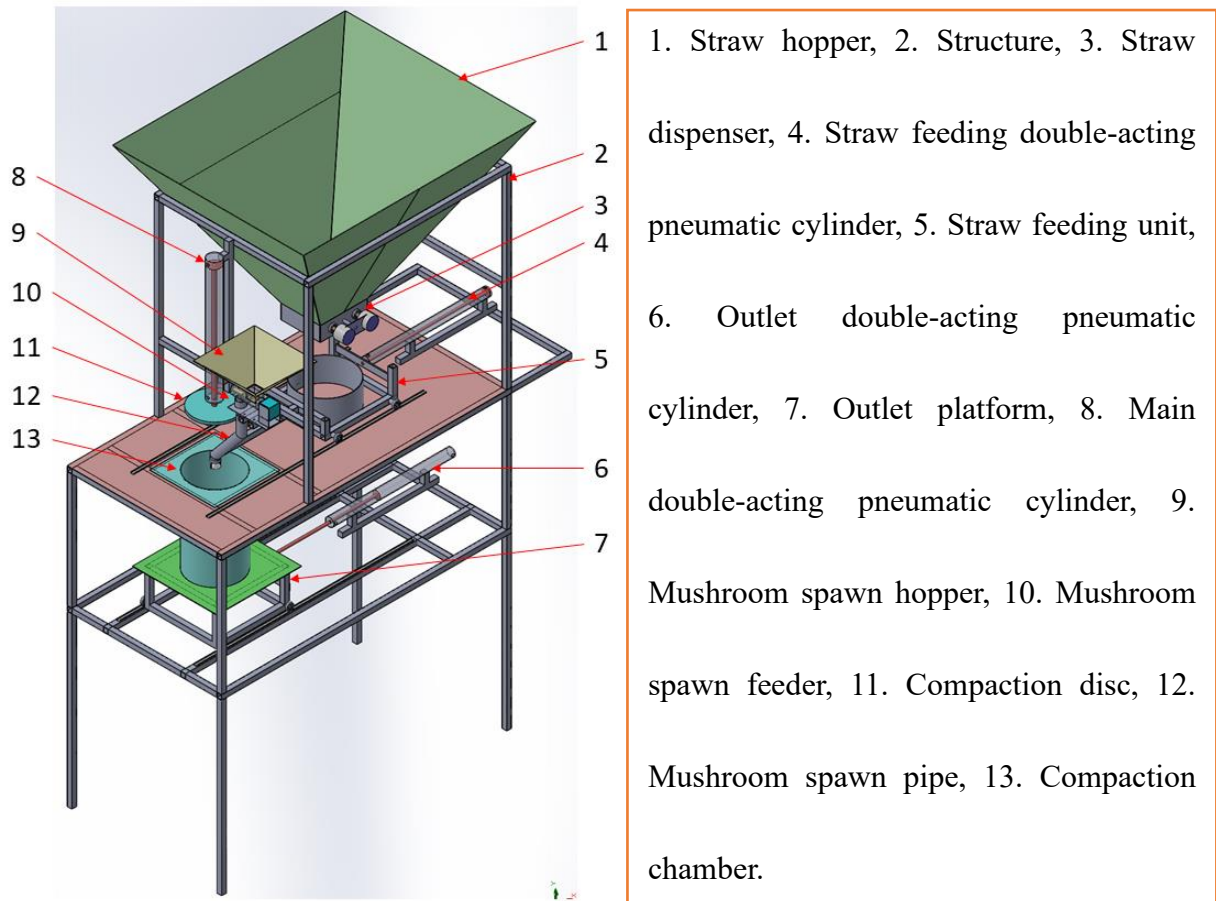


Fig. 1: 3D computer aided design (CAD) of layer oyster mushroom plantation machine