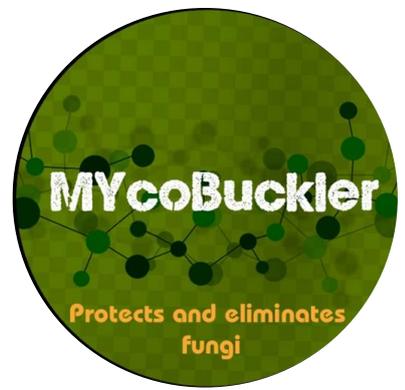


MYCOBUCKLER Executive Summary



Company Name: MYCOBUCKLER, aspiring Start-Up

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VISION: Contribute for efficient indoor mold control in a environmental responsible way

MISSION: Develop new antifungal additives based on the plant lipids

Indoor air pollution is major cause of morbidity and mortality worldwide. A major source of indoor air pollution is the contamination with fungi, in particular filamentous fungi (mold). Scientific evidences show that health problems associated with the growth of indoor mold range from the increased prevalence of respiratory symptoms, allergies and asthma as well as perturbation of the immunological system. World health organization (WHO) guidelines for protecting public health state that *“most important means for avoiding adverse health effects is the prevention (or minimization) of persistent dampness and microbial growth on interior surfaces and in building structures”* [1]. Currently, surface disinfectants are used to prevent indoor microbial contamination. The chemicals mostly widely used include in its composition quaternary ammonium, phenolics, alcohols, aldehydes and inorganic compounds. These chemicals are toxic to all forms of life including humans [2].

MycoBuckler is an aspiring startup that aims to develop and produce new antifungal additives that are effective, non-toxic and biodegradable. They will allow the prevention/elimination of indoor recurrent fungal contaminations, minimizing the consequent health problems, in an environmentally responsible way. Scientific evidence collected showed that the interactions between plants and fungi are dynamic. Fungi can understand the interaction and shape its development in to better fit the environment. For example: the fungus senses the presence of the plant and it forms the structures that are necessary for plant attack [3]. The data in the lab suggest that other developmental alterations are occurring.

The major objective of MycoBuckler is to increase its technology readiness level of this project. To achieve this, the team needs 200. 000 €, so that in a two years time we can deliver a robust proof of concept (moving to technology readiness level 3) and start to design the subsequent scale up process. The team is in a unique position to foster the development of antifungal molecules based on the plant-fungal interaction as we own extensive knowledge on the natural raw materials that are on the basis of the interaction, expertise in chemistry and on the fungal biology.

The revenue stream will be the sales of the produced antifungal extracts as additives to main producers/distributors of surface disinfectant for house with environmental responsible policies (Unilever; Procter & Gamble or S. C. Johnson & Son).

REFERENCES

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