ALTERNATIVE TO CONVENTIONAL METHOD OF NITRITE ELIMINATION OF BIRD NEST (SWIFTLET)

Introduction

Swiftlet farming industry is a very profitable investment for those that are successful. The demand for edible bird’s nest from China, Hong Kong, Taiwan, Japan, South Korea, India and the Middle Eastern countries is increasing. Swiftlet industry in Malaysia is facing difficult time since August 2011 because Chinese government has banned on edible bird’s nest and its products from Malaysia. This is due to high level of nitrite (NO₂) spotted in edible bird’s nest (AQSIQ, 2011). As the consequences, the edible bird’s nest and swiftlet ranching industry in Malaysia has been hit hard. So, to meet the standard of Chinese government, an investigation is proposed by using indigenous microorganisms (IMO) technology for nitrite elimination in edible bird’s nest of swiftlet.

Preliminary Results

Figure 1: (a) Nitrite levels of bird soil for 14 days; (b) Nitrite level of bird soil treated with ElimiNit for 14 days.

Figure 2: (a) Color changes of EBN induced by bird soil on day 14; (b) No color changes of EBN after

The contamination of NO₂ in EBN mainly comes from the bird-soil, which involved enzymatic reaction by bacteria in natural environment at certain temperature, and humidity. Color of EBN also would become an indicator of NO₂ level. The higher the level of NO₂, the color of EBN changes from white to yellowish and brownish.

Preparation of ElimiNit

Publications


PATENT

NATURAL SWIFLET AROMA

(a) (b)

NOVELTY

⇒ Novel finding of nitrite elimination for swiftlet ranching.
⇒ Usage of totally organic material.

BENEFITS

⇒ Water-based product support green chemistry.
⇒ Cheaper price due to easy production process.