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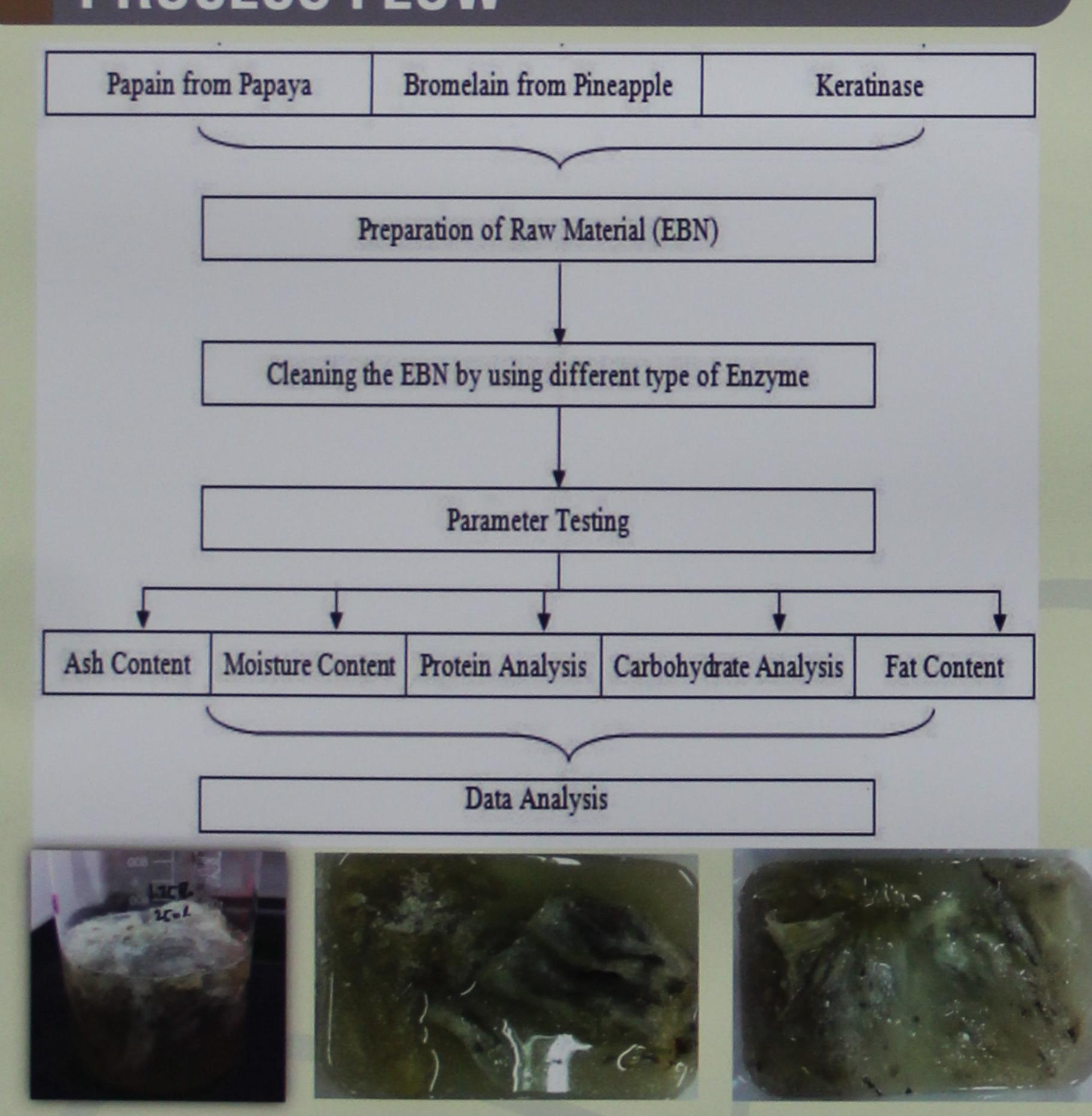
A NOVEL RAPID ENZYMATIC TREATMENT TO FACILITATE REMOVAL OF IMPURITIES FROM RAW EDIBLE BIRD NEST



PRODUCT DESCRIPTION

Edible bird's nest (EBN) is a delicacy known as the "Caviar of the East" made from salivary secretions from a swiftlet. A bird nest is processed by clearing the feathers off from the nests cement after washing briefly in distilled water. The tedious process of clearing the feathers requires skilled and patient labor, since this process is time consuming due to the size of the feathers that is hardly seen. Currently, the cleaning process use hydrogen peroxide as a bleaching agent. Usage of this chemical is not safe for human consumption and will reduce the nutritional value of edible bird nest. This study is conducted to evaluate the effectiveness of using enzymes to facilitate the cleaning process of EBN to enhance the quality for health and vitality.

PROCESS FLOW



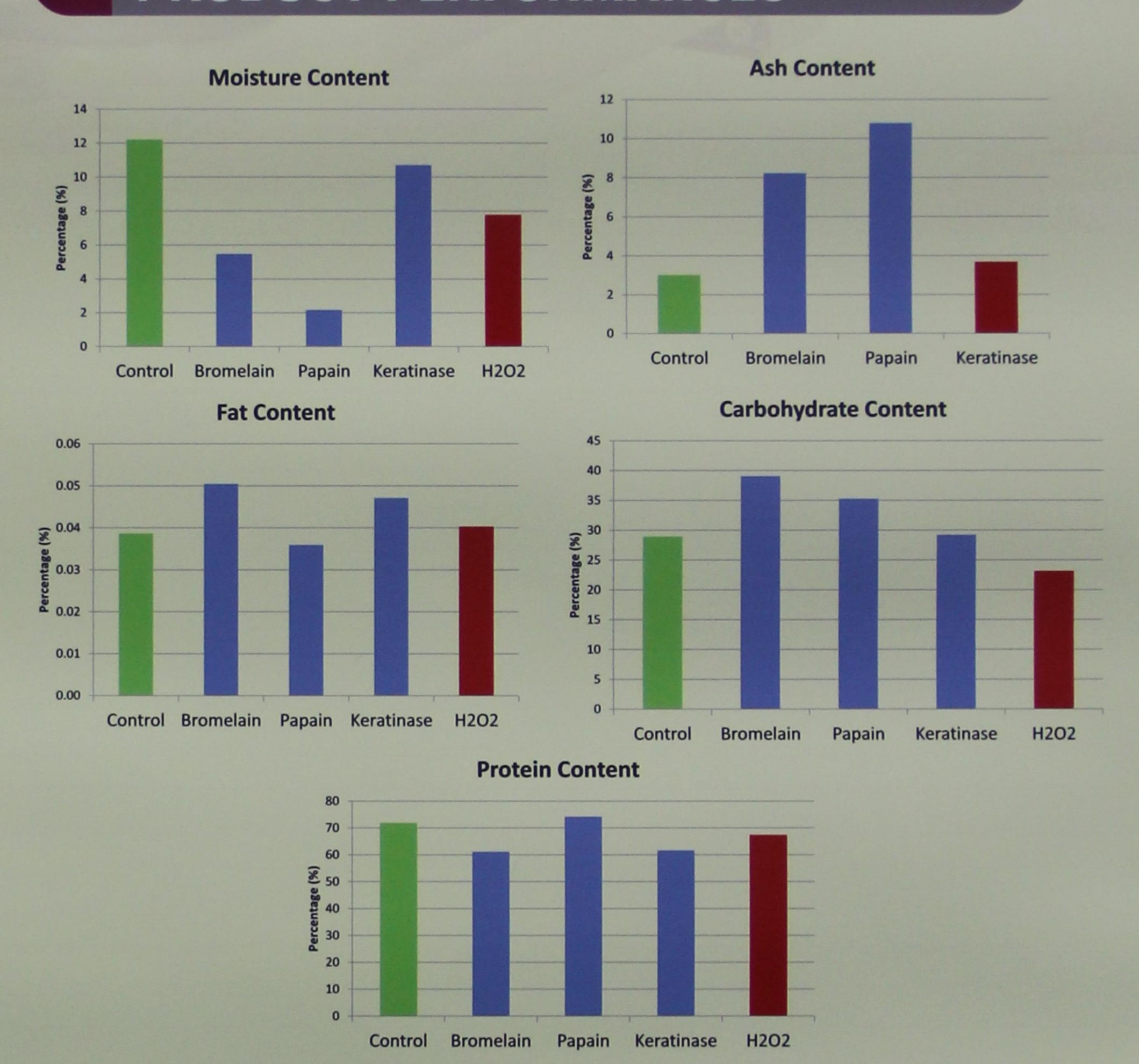
NOVFI TIES

- This technique has high potential for commercialization and standard cleaning method in EBN industry.
- Green Technology
- Chemical free
- Increase export earnings for EBN industries and Malaysia.
- Enzyme is health enhancer
- Nutrient content in EBN remain intact.
- Physical structure of EBN is retained.
- Reduced labour

INDUSTRIAL COLLABORATION

- KPT (UPM-COE Swiftlet) -9015-00001
- SSCM Northern Sdn.Bhd

PRODUCT PERFORMANCES



The proximate analysis result showed an increase in carbohydrate, ash and fat content in EBN when treated with enzymes.

CONCLUSION

- The use of enzyme to replace hydrogen peroxide as a cleaning agent enhanced the quality of EBN.
- The chemical cleaning process require further treatment to remove excess chemical retained in EBN.
- The process is a green technology and environment friendly.
- Enzyme presence in the EBN will gives an added values to the nutritional content and safer for human consumption.
- Manage to remove the egg like smell of EBN with pleasant fruity smell.

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PUBLICATION

- Zainab Hamzah et.al. (2013). Nutritional Properties of Edible Bird Nest (Aerodramusfuciphagus). Journal of asia science research. Reduced labour
- Zainab Hamzah *et.al.* (2013). A Rapid Technique to Determine Purity of Edible Bird Nest.
- Zainab Hamzah *et.al.* (2013). Facial Cream From Refined Nutrient-Rich Waste of Edible Bird Nest (EBN). Korea Invention News (KINEWS) Korea-Issue: Biology & Green Invention.

