Title of Project:

Determining the optimum thermal processing conditions for octopus packaged in retort pouches

Local Company: Walali Co. Ltd

Main Collaborating Institution: University of Mauritius

Project Leader: Mr Joseph Christopher Leopold

Research Collaborator(s)

Name	Organisation
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Technical Abstract

Rodrigues has a good reputation on Mauritian market for its highly valued products, owing to its non-polluted environment, traditional agriculture and tasty food. One of its much appreciated products is the octopus (Octopus cyanea) which is currently marketed either as fresh, frozen or dried. This study purports to explore another avenue for value-addition of Rodriguan octopus through the development of shelf-stable, ready-to-eat convenience products that would satisfy the requirements of the modern consumer. The technique chosen is thermal processing because it not only affects cooking of the octopus but also is an excellent preservation method that allows the products to keep for more than six months at room temperature. Instead of metal can however, retort pouch is to be used, which would help reduce production, storage and transportation costs. Octopus will be prepared in two different ways: (i) salted and cooked and (ii) vindaye. 205-210 grams of so-prepared octopus will then be packed in 18*12 cm³ retort pouches and thermally sterilised. The latter will be effected in a water immersion over-pressure retort. Experiments will be run to define the adequate process lethality F₀ to achieve commercial sterility. The process will be validated via microbiological tests and sensory analysis.

Key Words: *Octopus cyanea*, retort pouch, thermal process, F₀ value