

## Biomedical Properties of Haruan, *Channa striatus*

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### Introduction

This research is to elucidate the biomedical properties and to identify the bioactive compound in haruan, *Channa striatus*, for wound healing. Both the fatty and amino acids profile of haruan had given a strong indication on the potential of haruan in wound healing. Subsequently, the antinociceptive properties of had certainly supporting our hypothesis that haruan is a good candidate for wound healing. However, more researches are needed before a firm conclusion could be drawn on haruan. I certainly need to look at anti-microbial, anti-inflammatory, antioxidant and other related properties. It is my aims is to finally identified the responsible compound and to produce biomedical products for skin care or treatment.

### Materials and Methods

Most of the biochemical analysis is based on standards procedures and being published. Similarly the biomedical properties of haruan are done using animal such as mice, and some are using the standard biotechnological techniques. Haruan samples will be obtained from Pontian, Johor and the extraction or sample preparation were described in Mat Jais, et al., 1994; 1997 and 1998.

### Results and Discussion

Fatty and amino acid composition in haruan is very ideal for wound healing, tissue repair and growth (Mat Jais, et al., 1994 and Mat Jais, et al., 1998). These are the collaborative research carried out at Perth Royal Hospital, Perth Western Australia with Dr Croft and Dr McCulloch, as well as with Dr Kahnit and Dr Prasat at University of Chulalongkorn, Bangkok, Thailand. It is good to work with established scientists and in their well equip laboratory. The other interesting properties of ha-

ruan are the antinociceptive, which is comparable to morphine (Mat Jais, et al., 1997) and this is in collaboration with Dr Lee's group at Department of Anaesthesia, National University of Singapore. Our latest data is showing that the compound responsible for wound healing and antinociceptive property in haruan should be of as macromolecule. At this point, I real and seriously hope that my research grant will be extended to end of 2000 for I need to purchase chemicals, fresh haruan samples, laboratory animal and proceed with the collaboration. I need about RM 70,000.00 for 1999 and at least an equal amount next year for I am planning to carry out clinical trial.

### Conclusions

Haruan certainly contains the basic materials for wound healing.

### Benefits from the study

The research indicates that haruan is suitable for skincare or treatment agent, and is suitable for other wound healing related processes.

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