UNIVERSITI SAINS MALAYSIA

# UNIVERSITY RESEARCH GRANT
# FINAL REPORT
## *Geran Penyelidikan Universiti*
## *Laporan Akhir*

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| A. | **TITLE OF RESEARCH:**<br>*Tajuk penyelidikan:*<br><br>**Honey dressing as a means of granulation tissue promoter for wounds in patients with diabetic foot ulcers.** |
| B. | **PERSONAL PARTICULARS OF RESEARCHER** / *MAKLUMAT PENYELIDIK:* |
| (i) | **Name of Research Leader:**<br>*Nama Ketua Penyelidik:*<br>**Dr Abdul Nawfar Bin Sadagatullah** |
| | **Name of Co-Researcher**<br>*Nama Penyelidik Bersama:*<br>1. **Dr Mohammad bin Paiman**<br>2. **Dr Mohd. Iskandar Bin Mohd. Amin** |
| (ii) | **School/Institute/Centre/Unit :**<br>*Pusat Pengajian /Institut/Pusat/Unit :*<br>**Pusat Pengajian Sains Perubatan** |

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| C. | **Research Platform (Please tick (/) the appropriate box):**<br>*Pelantar Penyelidikan (Sila tanda (/) kotak berkenaan):*<br><br>☐ **A. Life Sciences**<br>*Sains Hayat*<br><br>☐ **B. Fundamental**<br>*Fundamental*<br><br>☐ **C. Engineering & Technology**<br>*Kejuruteraan & Teknologi*<br><br>☐ **D. Social Transformation**<br>*Transformasi Sosial*<br><br>☐ **E. Information & Communications Technology (ICT)**<br>*Teknologi Maklumat & Komunikasi*<br><br>☑ **F. Clinical Sciences**<br>*Sains Klinikal*<br><br>☐ **G. Biomedical & Health Sciences**<br>*Bioperubatan Sains Kesihatan* |
| D. | **Duration of this research :**<br>*Tempoh masa penyelidikan ini :*<br><br>***Duration :** .3 Tahun<br>*Tempoh :*<br><br>**From** : 19 October, 2007 **To** : 30 September,2010<br>*Dari:* *Ke :* |

E. **ABSTRACT OF RESEARCH**

(Abstract)


Honey dressing as a means of granulation tissue promoter for wounds in patients with diabetic foot ulcers.

Honey has been used as dressing material for various types of wound.The orthopaedic department of the school of Medical sciences , Universiti Sains Malaysia have experience using honey on recalcitrant wound at the foot of diabetic patients. An anecdotal observation is the promotion of healing has been hastened in these types of wound.Worldwide, similar finding have been noted with various types of wound treated with honey dressing. The New Zealand 'Manuka' Honey has been extensively studied and is claimed to have superior chemical desloughing properties and also as a good agent for promotion of granulationThe 'Manuka' honey from New Zealand is at present being promoted and being sold as a medical product for wound dressing with substantial research to back the manufacturers' claims At present the local Tualang Honey has been discovered to be consistent in its content and has a potential to be promoted as 'medical grade' honey.

This study was part of a group of studies done by the honey research cluster/ group. It was a head to head randomized single blinded clinical trial comparing the granulation tissue promoting effects of Tualang Honey as compared to the gold standard widely acclaimed Manuka honey. The general objective was to prove that the malaysian Tualang honey was comparable to Manuka honey to treat recalcitrant wounds (the example wound chosen was a diabetic foot ulcer). The study aim is so that at one time the Malaysian honey can be marketed as medical grade honey.


***Abstrak Penyelidikan***

(Abstrak).


Penggunaan madu sebagai perangsang tisu granulasi untuk luka di kaki pesakit diabetes (kencing manis)

Madu lebah telah digunakan sebagai bahan pengubatan pelbagai jenis luka. Jabatan Ortopedik, Pusat Pengajian Sains Perubatan , Universiti Sains Malaysia berpengalaman mnggunakan madu untuk perawatan untuk luka-luka yang sukar sembuh seperti ulser pada pesakit kencing manis. Pengamatan pengalaman ini menunjukkan luka-luka tersebut telah sembuh dengan lebih cepat bila madu digunakan. Pengamatan sepertinya telah dilaporkan dengan penggunaan pelbagai jenis madu di seluruh dunia. Madu jenis Manuka dar New Zealand telah di kaji dengan mendalam dan di dakwa penyelidik –penyelidik mengandungi bahan kimia yang terbaik untuk penyembuhan luka. Berdasarkan penyelidikan-penyelidikan tersebut madu Manuka telah dipromosi serata dunia sebagai "Madu Gred Perubatan". Madu Malaysia jenis tualang telah di kaji dan di dapati mempunyai potensi yang serupa untuk di promosi seperti madu Manuka.

Kajian yang telah dilakukan sebagai satu dari pelbagai kajian serentak kluster/ kumpulan madu untuk tujuan pengubatan. Ia merupakan kajian klinikal setentang secara rawak dan "blinded" untuk membandingkan kesan rangsangan madu Tualang berbanding dengan madu Manuka pada tisu granulasi luka kaki pesakit diabetes yang telah secara umum diketahui mempunyai masalah penyembuhan.