

**TCTR ID : TCTR20220809007**

**Overall Recruitment Status : Completed (No Results)**

**OTHER ID :**

**Retrospective registration**  
**This protocol was registered after enrollment of the first participant.**

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**Tracking Information**

First Submitted Date : 07 August 2022  
First Posted Date : 09 August 2022  
Last Update Posted Date : 09 August 2022

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**Title**

Public Title : Acheta domesticus: A Natural Source of Antioxidant, Anti-Aging, and Anti-Inflammatory Active Ingredients for Cosmetic Applications  
Acronym : No Data  
Scientific Title : Acheta domesticus: A Natural Source of Antioxidant, Anti-Aging, and Anti-Inflammatory Active Ingredients for Cosmetic Applications  
Sponsor ID/ IRB ID/ EC ID : AMSEC-64EX-029  
Registration Site : Thai Clinical Trials Registry  
URL : <https://www.thaiclinicaltrials.org/show/TCTR20220809007>  
Secondary ID : No Secondary ID

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**Ethics Review**

1. Board Approval : Submitted, approved  
Approval Number : AMSEC-64EX-029  
Date of Approval : 12 July 2022  
Board Name : Human Research Ethics Unit Faculty of Associated Medical Sciences  
Board Affiliation : Chiang Mai University, Thailand  
Board Contact : Business Phone : 053936026 Ext. No Data  
Business Email : research-ams@cmu.ac.th  
Business Address : Faculty of Associated Medical Sciences, CMU, 110 Intawaroros Rd., Sripoom, Chiang Mai, Thailand 50200

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**Sponsor**

Source(s) of Monetary or Material Supports : Royal Golden Jubilee Ph.D. Program (RGJ-Ph.D. Program)  
Study Primary Sponsor : Royal Golden Jubilee Ph.D. Program (RGJ-Ph.D. Program)  
Responsible Party : Name/Official Title : Kankanit Yeerong  
Organization : Faculty of Pharmacy, Chiang Mai University  
Phone : 0955989805 Ext. No Data  
Email : kankanit.yr@gmail.com  
Study Secondary Sponsor : National Research Council of Thailand (NRCT)

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**Protocol Synopsis**

Protocol Synopsis : To investigate cytotoxicity of Acheta domesticus extract on peripheral blood mononuclear cells (PBMCs) using 3-[4,5-dimethylthiazol-2-yl]-2,5 diphenyl tetrazolium bromide (MTT) assay.

**URL not available**

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**Health Conditions**

Health Condition(s) or Problem(s) Studied : Five healthy volunteers (1 man and 4 women), aged between 18-59 years, were included in the study.  
Keywords : Healthy volunteers

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**Eligibility**

Inclusion Criteria : Five healthy volunteers (1 man and 4 women), aged between 18-50 years, were included in the study.  
Gender : Both  
Age Limit : Minimum : 18 Years Maximum : 50 Years

Exclusion Criteria : Having medical conditions  
Accept Healthy Volunteers : Yes

## Status

Overall Recruitment Status : Completed

Key Trial Dates      Study Start Date (First enrollment) : 11 July 2022      Indicate Type : Actual  
Completion Date (Last subject, Last visit) : 31 July 2022      Indicate Type : Actual  
Study Completion Date : 10 July 2023      Indicate Type : Anticipated

## Design

Study Type : Interventional

Primary Purpose : Treatment

Study Phase : Phase 0

Intervention Model : Single arm

Number of Arms : 1

Masking : Masked      Masked Role : Allocation concealment,  
Allocation : N/A  
Control : N/A

Study Endpoint Classification : Safety Study

Sample size

Planned sample size : 5  
Actual sample size at study completion : 5

Intervention Arm 1

Intervention name : Acheta domesticus extracts

Intervention Type : Experimental

Intervention Classification : Other

Intervention Description : Cytotoxic effects of A. domesticus extracts on PBMCs using MTT assay. Five healthy volunteers one man and four women aged between twenty-one to fifty years were included in the study. Informed consent for study participation was obtained from all volunteers. PBMCs were collected from five blood donors. The blood was diluted with the same volume of PBS. Consequently, the diluted blood was added with Ficoll Paque reagent and then centrifuged. The PBMCs layer was collected and washed 3 times with PBS and cultured in RPMI 1640 media supplementing with ten percent FBS, one mM L glutamine, and one hundred microgram per ml penicillin streptomycin. PBMCs were separately added to each well of 96 well plates and incubated for 24 h in a humidified incubator. Consequently, each A. domesticus extract concentration ranging from 0 to 100 microgram/ml was added and further incubated for 48 h. After incubation the medium was discarded and MTT dye solution was added and further maintained for 4 h. Subsequently the supernatant was completely discarded. Then DMSO was added and mixed thoroughly to dissolve purple formazan crystals. The mixtures were measured for absorbance at 578 nm with a reference wavelength of 630 nm using an ELISA plate reader. The twenty percent of inhibitory concentration was defined as the concentration that can inhibit cell growth by twenty percent compared to the untreated cells.

## Outcome

### Primary Outcome

1. Outcome Name : Twenty percent of inhibitory concentration (IC20)  
Metric / Method of measurement : MTT  
Time point : 48 h

### Secondary Outcome

1. Outcome Name : N/A  
Metric / Method of measurement : N/A  
Time point : N/A

## Location

### Section A : Central Contact

Central Contact      First Name : Kankanit      Middle Name :      Last Name : Yeerong

Degree : Doctor of Pharmacy      Phone : 0955989805 Ext. : No Data      Email : kankanit.yr@gmail.com  
Central Contact Backup First Name : Wantida      Middle Name :      Lastname : Chaiyana  
Degree : Ph.D.      Phone : 053944342 Ext. : No Data      Email : Aa\_Rx105@hotmail.com

**Section B Facility Information and Contact**

1. Site Name : Faculty of Associated Medical Sciences, Chiang Mai University

City : Mueang Chiang Mai      State/Province : Chiang Mai      Postal Code : 50200

Country : Thailand      Recruitment Status : Completed

**Facility Contact** First Name : Kankanit      Middle Name :      Last Name : Yeerong

Degree : Doctor of Pharmacy      Phone : 0955989805 Ext. : No Data      Email : kankanit.yr@gmail.com

**Facility Contact Backup** First Name : Wantida      Middle Name :      Last Name : Chaiyana

Degree : Ph.D.      Phone : 053944342 Ext. : No Data      Email : Aa\_Rx105@hotmail.com

**Investigator Name** First Name : Kankanit      Middle Name :      Last Name : Yeerong

Degree :      Role : Principal Investigator

**Section C : Contact for Public Queries (Responsible Person)**

First Name : Kankanit      Middle Name :      Last Name : Yeerong

Degree : Doctor of Pharmacy      Phone : 0955989805 Ext. : No Data      Email : kankanit.yr@gmail.com

Postal Address : 239 Suthep Alley, Mueang Chiang Mai Dist

State/Province : Chiang Mai      Postal Code : 50200

Country : Thailand      Official Role : Study Principal Investigator

Organization Affiliation : Faculty of Pharmacy, Chiang Mai University

**Section D : Contact for Scientific Queries (Responsible Person)**

First Name : Kankanit      Middle Name :      Last Name : Yeerong

Degree : No Data      Phone : 0955989805 Ext. : No Data      Email : kankanit.yr@gmail.com

Postal Address : 239 Suthep Alley, Mueang Chiang Mai Dist

State/Province : Chiang Mai      Postal Code : 50200

Country : Thailand      Official Role : Study Principal Investigator

Organization Affiliation : Faculty of Pharmacy,Chiang Mai University

**Summary Results**

Date of posting of results summaries : Summary results not yet available

Date of first journal publication of results : Not yet published

**Deidentified Individual Participant-level Data Sharing**

Plan to share IPD : No

Reason : Need a consensus

**Publication from this study**

MEDLINE Identifier : No Data

URL link to full text publication : No Data