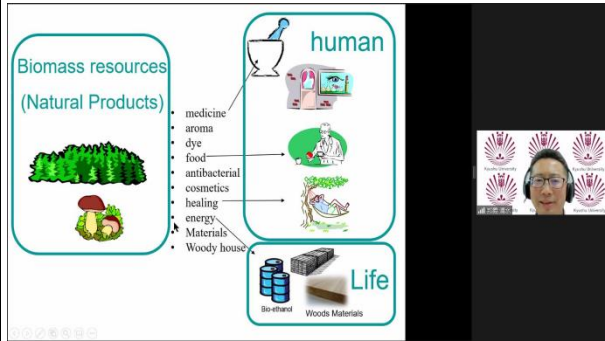


【イベント】

第17回アジア天然物会議 (ANPC)



【概要】

第17回アジア天然物会議 (Asian Natural Products Conference ; ANPC) は、2023年11月9日に開催されました。中国、エジプト、日本、インドネシア、マレーシアの5カ国から8名の研究者が、天然物の利用について発表しました。

発表者らは、伝統的に用いられる薬用植物の光保護作用や化粧品としての特性など、天然物をスキンケア剤に利用することに関して議論しました。また、皮膚マイクロバイオームにおける酸化還元細菌のような天然物分野における最近の取り組みや、創薬や抗ウイルス剤の分野における薬用植物の利用に関して議論しました。

第17回ANPCは天然物のさらなる価値と可能性を様々な側面から明らかにし、天然物の開発と研究に対する新たな展望を示しました。

Cream Formulation

Sample	UVB Protection		UVA Protection		Critical Wavelength
	In vitro SPF (Mean ± SD)	UVA ratio	Boat Star Rating	Category	
Cream Base B1	0.91 ± 0.03	0.05	-	No Claim	43.5 ± 155.63
Formulation F1 (5%) (30%)	1.34 ± 0.15	-	***	Moderate	378.9 ± 2.29

The cream with 5% propolis water fraction (from the involucrum) has a moderate Boat star rating, offers "Broad Spectrum" coverage, and provides excellent UVA protection.

Summary & Discussion

At present, studies on the bioactive components of vanilla focus on vanillin and some terpenoids, while there are few studies on other components, among which there may be a huge potential of biological activity.

Compound 1 and 2 were firstly isolated and identified in *V. pompona* stems and leaves. As the major secondary metabolites however, there were few reports on the chemistry study and no studies at all on their biological activity. Which has huge potential on study and development.

V. pompona stems and leaves crude extract, and isolated compounds 1 & 2 were considered to have a great potential of skin anti-aging. And compound 1 & 2 promoted the ECM synthesis was considered via regulate the TGF- β /SMAD pathway.

Regarding the current study limitation about vanilla species and compounds 1 & 2, they still have great potential for research. We are still trying to study their other biological activities. Hoping to give a more comprehensive study in the future.

Mohanasundarapand Ian氏の発表スライドの一例

Wang duanyang氏の発表スライドの一例

B- UVB-induced HaCaT cell damage assay

UVC: Shortest wavelength, most energetic, most germicidal, most DNA damaging.

UVB: Affects skin cells, causes sunburn, skin aging, skin cancer.

UVA: Longest wavelength, penetrates deepest, causes skin aging, skin cancer.

Cell Seeding → Incubation → Compound Treatment → UVB Irradiation (30 mJ/cm² with a fluorescent lamp that produced its highest energy output at 312 nm) → Post-UVB Incubation → Evaluation of cell viability using MTT assay

Analysis Conducted

- Proximate analysis**: To analysis moisture content
- Fatty acid analysis**: To determine PUFA & MUFA content
- Amino acid analysis**: To calculate amino acid content
- Mineral & Heavy Metal Analysis**: To analysis mineral and heavy metal content
- Antioxidative Analysis** (Total phenolic content, Total Flavonoid, FRAP): To analysis antioxidant capacity of *C. racemosa*
- In vivo anti diabetic study**: To observe and analysis anti-diabetic ability of *C. racemosa*

Amira Alkattan氏の発表スライドの一例

Thilaghavani Nagappan氏の発表スライドの一例

Photoprotective Properties of Essential Oils from Traditional Medicinal Plants - An In vitro Analysis

Dr. Rameshkumar Santhanam
Senior Lecturer
Faculty of Science and Marine Environment
Universiti Malaysia Terengganu, Malaysia

Colonization of Nasal Cavities by *Staphylococcus epidermidis* Mitigates SARS-CoV-2 Nucleocapsid Phosphoprotein-induced Interleukin (IL)-6 in the Lung.

A: Schematic of the experimental setup showing the colonization of nasal cavities by *S. epidermidis* and the subsequent analysis of IL-6 levels in the lung.

B: Line graph showing IL-6 levels over time for different groups.

C: Bar graph showing IL-6 levels for different groups.

Rameshkumar Santhanam氏の発表スライドの一例

Eric Chun Ming Huang氏の発表スライドの一例

