

Targeting Migrasome Formation: Rhubarb-Derived Emodin Alleviates Inflammation and Telangiectasia in Rosacea

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- *A rosacea-like mouse model closely mimicking disease-relevant features, 氏 was successfully established.**
- *Emodin, an anthraquinone compound derived from rhubarb with anti-inflammatory and vascular modulating properties was applied.**
- *Short-term topical emodin application alleviated skin inflammation and inhibited pathological telangiectasia.**
- *Migrasomes were detected in both mouse lesion skin and peripheral blood and play an important role in the disease**
- *Emodin exerts therapeutic effects by inhibiting migrasome formation derived from highly migratory endothelial cells in lesion tissue, and eases symptom of the disease.**

**Anti-depressant Effects of Nano-Curcumin in a Dexamethasone-Induced Depression Model :
Proteomics and Histopathological Evidence**

Ponthip Cheenkhwan Suchiwa Pan-on² , Waree Tiyafoonchai,
Samur Thanoi⁴, Sawanya Charoenlappanit⁵, Sittiruk Roytrakul,
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***Nano-curcurnin has been developed and used for treatment in the Dexamethasone-induced adult Sprague-Dawley rats depression model.**

*** Nano-curcumin attenuates DEX-induced molecular and structural abnormalities by modulating key signaling pathways involved in synaptic function,**

Attenuation of LPS-Induced Anxiety behavior and Hippocampal Neuronal Damage by CBD-Enriched Hemp Extract via Inflammatory Pathways Modulation

Plaiyfah Janthueng, Sri-arun Iamjan , Sawanya Charoenlappanit, Sittiruk Roytrakul, Prapapan Temkitthawon, Jureepon Roboo , Paweena Kaewman , Samur Thanoi, and Sutisa Nudmamud-Thanoi *

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- **Canabidiol from Hemp extract (CBDE) derived from hemp has anti-inflammatory effect.**
- **LPS induced anxiety-like behavior.**
- **CBDE showed a better efficacy than DEX in treating the LPS induced rat anxiety.**
- **CBDE exerts neuroprotective effects in LPS-induced anxiety model without inducing systemic immune dysregulation.**

Onychium japonicum Water Extract Enhances Wound Healing via EGFR/STAT3/MAPK Activation and Anti-Inflammatory Effects.

Yu-Chi Tsai, Rong-Chen Chang, Yun-Hsuan Lee, Chun-Ching Huang,
Lei Wanl, and Shih-Hsuan Chan*

School of Chinese Medicine, College of Chinese Medicine, **China Medical University**

Onychium Japonicum water extract pertains an anti-inflammatory property and facilitates wound healing through the activation of EGFR/STAT3/MAPK pathway, implying a skin repair potential.

Vancomycin-sensitive gut microbiota drives *Dendrobium officinale* polysaccharide's degradation and its protective effects against colitis in mice

HUO Chuying 1, LI Lifeng 1, and HAN Quanbin

School of Chinese Medicine, **Hong Kong Baptist University**, Hong Kong

- The study is to explore the role of gut microbiota on colitis.
- DDS-induced mouse colitis model was used
- Vancomycin-sensitive gut bacterium, ***Bifidobacterium pseudolongum*** was identified as the contributor for **mannan endo-1,4-beta-mannosidase** that catabolizes *Dendrobium officinale* polysaccharide (DOP) leading to protection of colitis

Hesperetin Rejuvenates the Aging Liver via Modulation of the CISD2-Associated Longevity Pathway.

Zhao-Qing Shen, Tsai-Wen Teng, Ting-Fen Tsail*

Department of Life Sciences and Institute of Genome Sciences, **National Yang Ming Chiao Tung University**

- **Study the effects of hesperetin, a citrus-derived flavonoid, on liver aging using naturally aged mouse models.**
- * The study demonstrated that hesperetin rejuvenates the aging liver via modulation of CISD2-associated longevity pathways, particularly in preservation of mitochondrial integrity and endoplasmic reticulum homeostasis in senescent hepatocytes.**

CymMV-Mediated Silencing of DcPDS Enhances Triterpene Biosynthesis in *Dendrobium catenatum* through Reprogramming of Isoprenoid Metabolism.

Aqsa Baig, , Ying-Wen Huang, Meng-Shiou Lee, Ming-Kuem Lin*

Graduate Institute of Biological Science and Technology, College of Life Sciences,
China Medical University, Taichung 404328.

- ***Dendrobium catenatum* is a valuable medicinal orchid with rich content of triterpenes and other terpenoids.**
- **This study aimed to enhance triterpene biosynthesis in *D. catenatum* by silencing the phytoene desaturase (PDS) using the cymbidium mosaic virus (CymMV) –induced gene silencing system.**
- **PDS gene silencing is an effective strategy to enhance triterpene biosynthesis in *D. catenatum*, which can be applied in the production of valuable secondary metabolites for applications in medicine and other industries.**