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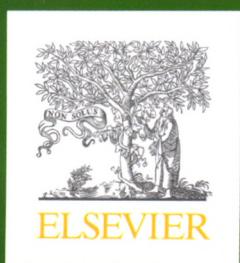
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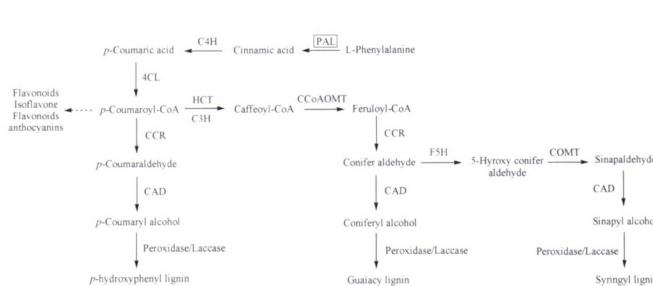
•Research articles•

The phenylalanine ammonia-lyase gene family in *Isatis indigotica* Fort.: molecular cloning, characterization, and expression analysis

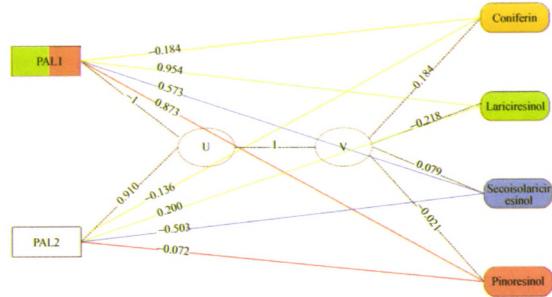
801-812

MA Rui-Fang, LIU Qian-Zi, XIAO Ying, ZHANG Lei, LI Qing, YIN Jun ^{*}, CHEN Wan-Sheng ^{*}

- ◆ One additional gene (*IiPAL2*) was identified from *Isatis indigotica* transcription profiling
- ◆ Both recombinant proteins were shown to catalyze the conversion of L-Phe to trans-cinnamic acid
- ◆ Correlation analysis indicated that *IiPAL1* was more close to the biosynthesis of secondary metabolites than *IiPAL2*



Lignin biosynthetic pathway



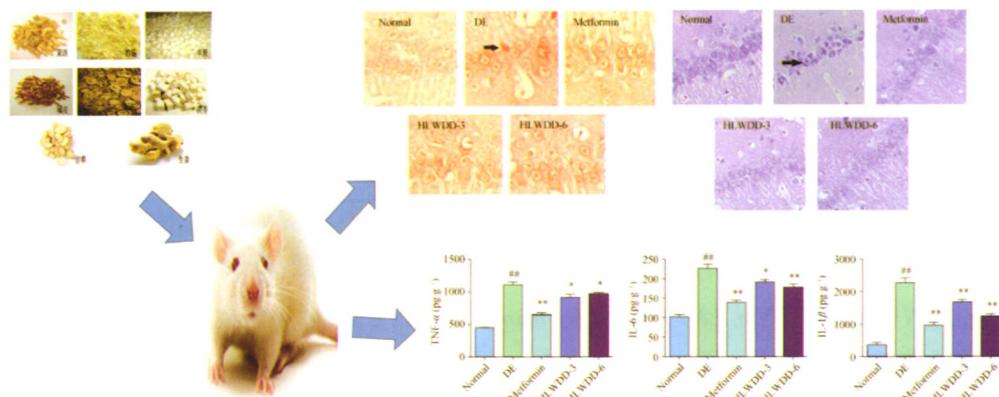
Correlation network for the metabolites (right) and *IiPALS* (left)

Protective effects of Huanglian Wendan Decoction against cognitive deficits and neuronal damages in rats with diabetic encephalopathy by inhibiting the release of inflammatory cytokines and repairing insulin signaling pathway in hippocampus

813-822

LI Yue-Bi, ZHANG Wei-Hua, LIU Hua-Dong, LIU Zhou, MA Shi-Ping ^{*}

Based on our results, we confirmed protective effects of Huanglian Wendan Decoction in diabetic encephalopathy (DE) rats. These effects related with inhibiting the release of inflammatory cytokines and repairing insulin signaling pathway in hippocampus of the DE rats.

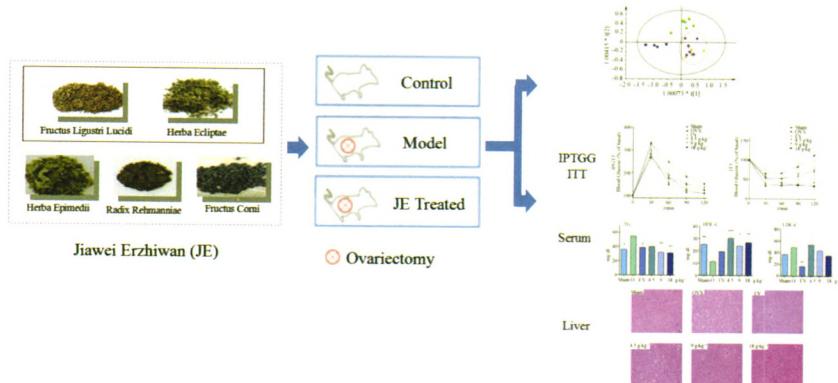


Jiawei Erzhiwan improves menopausal metabolic syndrome by enhancing insulin secretion in pancreatic β cells

823-834

WAN Xiao-Meng, ZHANG Mu, ZHANG Pei, XIE Zhi-Shen, XU Feng-Guo, ZHOU Ping, MA Shi-Ping ^{*}, XU Xiao-Jun ^{*}

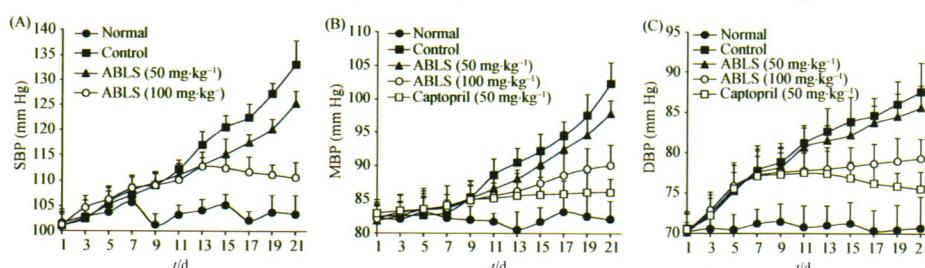
Jiawei Erzhiwan (JE), composed of Herba Ecliptae and Fructus Ligustri Lucidi, supplemented with Herba Epimedii, Radix Rehmanniae, and Fructus Corni, exhibited anti-Menopausal metabolic syndrome efficacy in ovariectomized (OVX) adult female rats.



Prophylactic effects of alkaloids from *Ba lotus* seeds on L-NNA-induced hypertension in mice 835-843

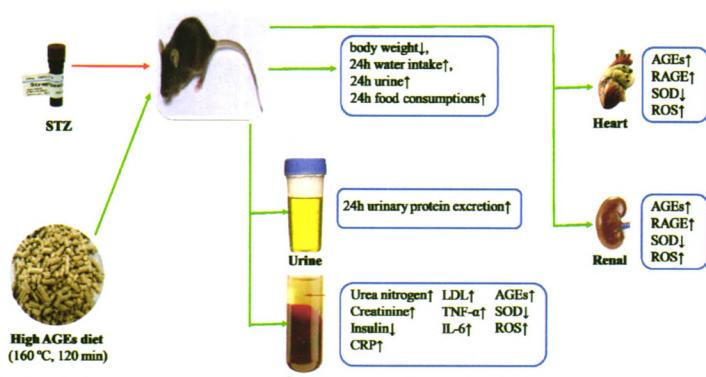
SUN Peng, ZHU Kai, WANG Cun, LIU Wei-Wei, PENG De-Guang ^{*}, ZHAO Xin ^{*}

Alkaloids from *Ba lotus* seeds (ABLS) had a good prophylactic effects of L-NNA-induced hypertension in mice.



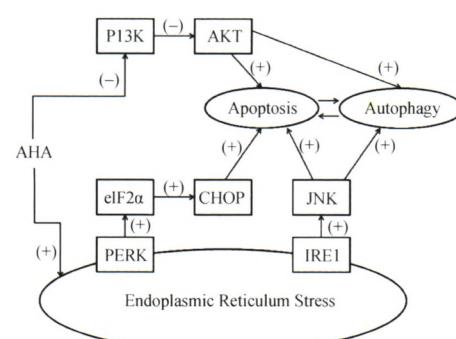
Food-advanced glycation end products aggravate the diabetic vascular complications via modulating the AGEs/RAGE pathway 844-855

LV Xing, LV Gao-Hong, DAI Guo-Ying, SUN Hong-Mei, XU Hui-Qin ^{*}



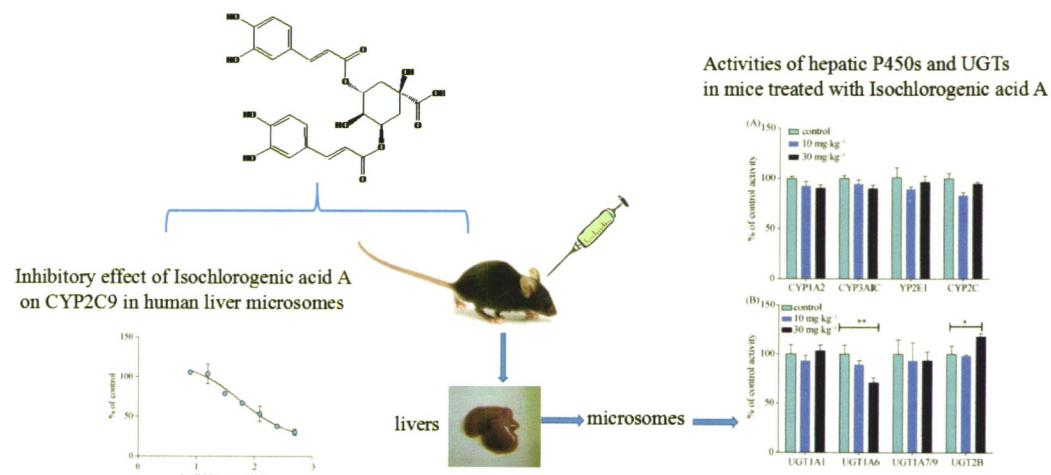
Agglutinin isolated from *Arisema heterophyllum* Blume induces apoptosis and autophagy in A549 cells through inhibiting PI3K/Akt pathway and inducing ER stress 856-864

FENG Li-Xing, SUN Peng, MI Tian, LIU Miao, LIU Wang, YAO Si, CAO Yi-Min, YU Xiao-Lu, WU Wan-Ying, JIANG Bao-Hong, YANG Min, GUO De-An ^{*}, LIU Xuan ^{*}



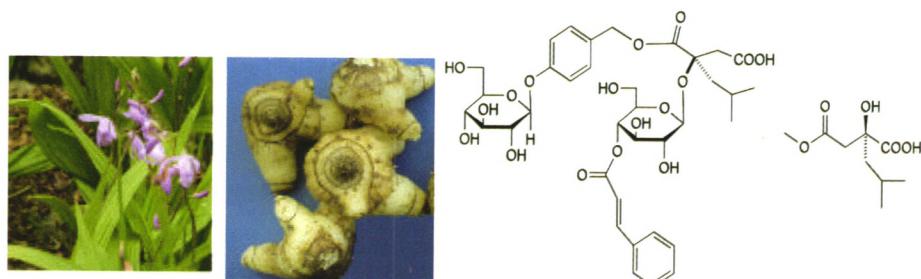
Agglutinin isolated from *Arisema heterophyllum* Blume (AHA) induced both apoptosis and autophagy in A549 cells. Cytotoxicity of AHA on cancer cells might be related to inhibition of PI3K/Akt pathway and induction of ER stress in AHA-treated cells.

WANG Jing, WANG Hong, PENG Ying, WANG Guang-Ji, HAO Hai-Ping *

Isolation and characterization of two new 2-isobutylmalates from *Bletilla striata*

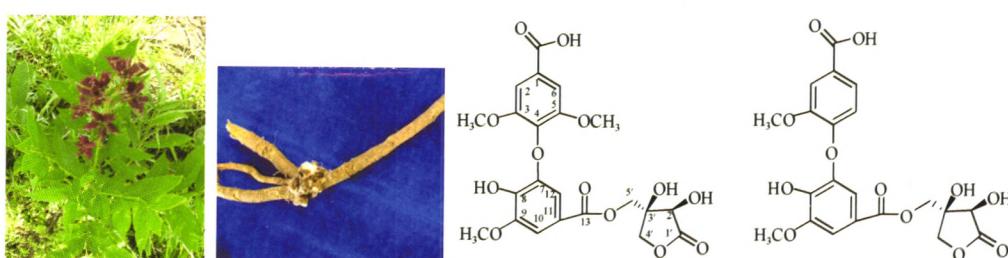
GUAN Huan-Yu, YAN Yan, WANG Yong-Lin, WANG Ai-Min, LIU Jun-Hong, HE Xun, LI Yong-Jun, HUANG Yong, LIAO Shang-Gao *

Two new 2-isobutylmalates, named bletimalates A (**1**) and B (**2**), together with other fifteen known compounds (**3–17**), were isolated and identified.

Identification of antioxidant activity of two new aromatic ring butyrolactone derivatives from *Dictamnus dasycarpus* Turcz.

GUO Li-Na, PEI Yue-Hu, XIE Fei-Xiang, LIU Lei, CONG Huan, CUI Hong-Xia, WANG Xiao-Li, LI Wen-Jing, JIAN Bai-Yu, LIU Ji-Cheng *

The present study carried out a phytochemical investigation on the root barks of *Dictamnus dasycarpus* Turcz., leading to the isolation and characterization of two new aromatic ring butyrolactone derivatives, dasycarpusphenol acid A (**1**) and dasycarpusphenol acid B (**2**). Their structures were elucidated by using spectroscopic techniques and HR-FAB-MS. Compounds **1** and **2** exhibited antioxidant activity, with their IC₅₀ values being 28.95 and 41.76 mg·mL⁻¹, respectively.



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Chinese Journal of Natural Medicines

Aims and Scopes

The Chinese Journal of Natural Medicines (CJNM) is devoted to communications among pharmaceutical and medicinal plant scientists who are interested in the advancement of the botanical, chemical, and biological sciences in support of the use of natural medicines in health care, in particular, traditional Chinese medicines (TCM). CJNM aims to cover a broad spectrum of original research papers and review articles on natural medicines or their products from all over the world, including those from TCM.

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