

• 計畫中文名稱	人工栽培樟芝產品成分之比較及對生理疾病保健預防功能之評估		
• 計畫英文名稱	Compositional and Functional Caparisons between Cultivated and Natural Taiwanofungal Camaphoratus on the Prevention of Cardiovascular-Hepatic Diseases		
• 系統編號	PG9410-2122	• 研究性質	應用研究
• 計畫編號	94 農科-12.1.3-糧-Z1(15)	• 研究方式	補助(研究/辦理)
• 主管機關	行政院農業委員會	• 研究期間	9401 ~ 9412
• 執行機構	私立台北醫學大學		
• 年度	94 年	• 研究經費	2800 千元
• 研究領域	食品科技		
• 研究人員	蘇慶華,林哲堂,侯文琪,梁有志,林時宜		
• 中文關鍵字	血液黏度；紅血球變形；高血脂；高血壓；高血壓鼠；樟芝；膽固醇；		
• 英文關鍵字	Blood Viscosity；Erythrocyte Deformability；Hyperlipidemic；Hypertension；Spontaneously Hypertensive Rat； <i>Taiwanofungus camphorates (Antrodia ampphorata)</i> ；Cholesterol		
• 中文摘要	<p>[細部計畫一:蘇慶華] 完成(1)野生天然樟芝、(2)固態栽培樟芝、(3)液態培養樟芝之大量萃取物提供以下子計畫之實驗所需。分析萃取物中三類及含酚化合物之比率。以 HPLC 及 LC/MS/MS 分析萃取物之可能成分。</p> <p>[細部計畫二:林哲堂] 完成(1)野生樟芝、(2)固態栽培樟芝(3)人工培養樟芝對於成年老鼠血液流動參數之影響包括全血液黏度之改善、血漿黏度之改善、紅血球變形能力之提升、紅血球聚集度之改善等生理現象。</p> <p>[細部計畫三:林時宜] 探討樟芝子實體有效成份在預防肝纖維化的功能評估。</p> <p>[細部計畫四:梁有志]</p>		

利用動物實驗來驗證天然及人工栽培(固態或液態)樟芝降低血脂之能力。

[細部計畫五:侯文琪]

建立高血壓老鼠平台並測試野生與人工栽培樟芝調節血壓的活性。1.說明(1)天然樟芝、(2)固態栽培樟芝、(3)液態培養樟芝之主要成分內容及改善(或保健)動物血液流變參數之機轉並且發表 SCI 論文。

整體而言, 本研究在提高固態培養樟芝之經濟價值以其未來做為農業推廣之農業經濟產物並避免天然樟芝之濫採。

[Subproject 1--C.H. Su]

The project is aimed on different sources including fruiting body from wild collection, solid-state cultivation and liquid culture of *Taiwanofungus camphoratus* (*Antrodia camphorata*) for the component analysis on triterpenoids and phenyl compound by means of HPLC and LC/MS/MS. In the meantime, extracts of *T. camphoratus* will be obtained from the fruiting body and cultivated products for the following subprojects.

[Subproject 2--C.T. Lin]

Rheological study on animal model will be performed to the samples of *T. camphoratus* from wild collection, solid-state cultivation and liquid culture. Mice with age of 6 months are fed with samples and parameters that influence rheology of blood such as whole blood viscosity, plasma viscosity, plasticity of erythrocyte and aggregating degree of erythrocyte will be measured to detect the improvement of blood flow properties by taking *T. camphoratus*.

[Subproject 3—S.I. Lin]

Studies on the prevention of liver fibrosis by *T. camphoratus* will be performed and the function of active components from different source of *T. camphoratus* will be investigated.

[Subproject 4—Y.T. Liang]

Animal model will be used to prove the hypolipidemic function of *T. camphoratus* samples from wild collection, solid-state cultivation and liquid culture.

[Subproject 5—W.C. Hou]

Hypertension animal model will be established to study the blood pressure regulation effect of *T. camphoratus* samples from wild

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collection, solid-state cultivation and liquid culture. Extractions will be carried out to investigate the component of each sample and the mechanism of blood pressure regulation is expected to elucidated/

In general, the project is to study the prevention function of *T. camphoratus* on cardiovascular-hepatic diseases. The cultivated samples (solid-state and liquid cultures) are compared to the traditional used fruiting body collected from nature and the possibility to replace wild collected *T. camphoratus* by cultivated ones is expected.