

• 計畫中文名稱	開發臺灣原生種小葉葡萄應用於預防保健食品之研究---開發小葉葡萄應用於保肝之評估		
• 計畫英文名稱	Exploration and Evaluation the Application of <i>Vitis thunbergii</i> var. <i>taiwaniana</i> for Its Liver Protection Effect		
• 系統編號	PD9605-0074	• 研究性質	應用研究
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• 研究人員	林時宜		
• 中文關鍵字	小葉葡萄; 脂肪肝炎; 肝臟纖維化		
• 英文關鍵字	--		
• 中文摘要	<p>進年來國人飲食西化，脂肪肝之病患快速增加，脂肪肝不但能引起慢性肝炎，而且亦有可能演變成重度肝纖維化(肝硬化)而造成肝衰竭及增加肝癌之機會，危害生命安全；因此探討脂肪肝及肝纖維化的機制及其預防和治療成爲相當重要的課題。由小葉葡萄之成分調查結果推測，其可能具有調節血脂、調節免疫機能、護肝、抗疲勞和延緩衰老的機能性功效，但其對脂肪肝炎及肝纖維化之保護作用則不十分清楚，因之本研究之目標爲探討小葉葡萄有效成份在預防脂肪肝炎及肝纖維化的功能評估。本研究將用二種動物模式:(1)以 high fat emulsion diet 灌食 Sprague-Dawley (SD) 6 周可引發脂肪肝炎，以此探討小葉葡萄有效成份是否可抑制老鼠之脂肪肝或肝炎。(2)實驗觀察小葉葡萄有效成份是否可抑制由 Thioacetamide(TA) 作用下所誘導 SD 老鼠的肝臟纖維化。以上兩種動物實驗皆利用採集之組織或血液標本去分析小葉葡萄有效成份之保護肝臟功能之效用。所用的方法包括老鼠之肝臟組織之 RT-PCR，Western blotting，histopathology，immunochemistry，及血液生化分析等技術。若小葉葡萄有效成份在動物模式能抑制老鼠脂肪肝炎或肝臟纖維化，將可進一步探討小葉葡萄有效成份在保護肝臟及預防人類肝臟纖維化中是否有臨床之價值。</p>		
• 英文摘要	<p>Due to modernization of life style in recent yrs, the prevalence of nonalcoholic fatty liver disease (NAFLD) has been increased dramatically. The NAFLD can not only induce steatohepatitis (NASH) but also result in progressive liver fibrosis which leading to life-threatening liver cirrhosis and even hepatocellular carcinoma. Therefore, to study the pathogenesis of NAFLD and find the strategies to prevent and treat NAFLD is a very important issue. It has been known that the components of <i>Vitis thunbergii</i> var. <i>taiwaniana</i> could have therapeutic effects including regulation of</p>		

lipid profile and immunity · liver protection · anti-fatigue and anti-aging effects. But its protection effect on NAFLD (including fatty liver, steatohepatitis and liver fibrosis) is not understood. Therefore, our project will focus on the evaluation of the prevention and treatment effects of *Vitis thunbergii* var. *taiwaniana* for NAFLD. We will use two animal models to achieve our goal. (1) Gavage the SD rat with high fat emulsion diet will induce fatty liver and steatohepatitis and will be used to test the protection effect of components derived from *Vitis thunbergii* var. *taiwaniana* (2) Use of TA to induced liver fibrosis in SD rat and test the the protection effect of components derived from *Vitis thunbergii* var. *taiwaniana* ° The liver specimens and blood samples will be collected to study the effect and mechanisms of liver protection of the extracts. Hopfully the results will be able to apply in the prevention and treatment of NAFLD in human.