• 系統編號	RG9405-4906		
• 計畫中文名稱	天然及人工栽培樟芝之降血脂功能評估		
• 計畫英文名稱	Studies on the Hypolipidemic Effect of Antrodia Camphorata		
• 主管機關	行政院農業委員會	• 計畫編號	93 農科-5.1.3-糧-Z3(4)
• 執行機構	台北醫學大學醫事技術學系暨生物醫學技術研究所		
• 本期期間	9309 ~ 9312		
• 報告頁數	4 頁	• 使用語言	中文
• 研究人員	梁有志 Yu-Chih.Liang		
• 中文關鍵字	樟芝		
• 英文關鍵字	Antrodia camphorata		
• 中文摘要	本計畫利用細胞株來評估天然及人工栽培(固態或液態)樟芝對脂質代謝的影響探討野生樟芝、固態栽培樟芝、液態培養樟芝，改善(或降低)血脂之可能性。實驗結果顯示，液態培養樟芝之各種萃取物均無法抑制脂肪合成酶，而固態栽培樟芝及野生樟芝對脂肪合成酶均有不同程度的抑制，其中又以甲醇萃取物的抑制效果最好，而固態栽培樟芝與野生樟芝的抑制效果是差不多的。另一實驗顯示，液態培養樟芝之各種萃取物均有些微增加 PPARalpha 或 PPARgamma 活性的作用，而固態栽培樟芝及野生樟芝對 PPARalpha 或 PPARgamma 活性有顯著增加其活性作用，其中又以甲醇萃取物的活化效果最好，而固態栽培樟芝與野生樟芝的活化效果是差不多的。實驗初步證實，固態栽培樟芝與野生樟芝具有抑制脂肪合成酶(fatty acid synthase, FAS)的表量及活化 PPAR 的活性，顯示固態栽培樟芝與野生樟芝可能具有降血脂的功能；而且固態栽培樟芝的生理功能與野生樟芝相似，顯示固態栽培之樟芝優於液態栽培之樟芝。		
• 英文摘要	Antrodia camphorata (A. camphorata) is a kind of fungus and parasite on the inner heartwood wall of Cinnamonum kanehirai in wilderness. It is a Taiwan-specific and known traditional Chinese medicine, and has been used to treatment of diarrhea, hypertension, itchy skin, and liver cancer. It also exhibits several biological activities such as antioxidative and hepatoprotective activities. To gain large amount of A. camphorata, several culture technologies have been developed, including solid-type culture and liquid-type culture. However, different culture conditions affect the components of functional chemicals in A. camphorata. In this plan, first we want to investigate the possibility of A. camphorata on the hypolipidemic activity by cell-base experiment. Second, we want to		

compare the hypolipidemic effect of solid-type culture, liquid-type culture, and wildness A. camphorata. The results indicated that both extractions of solid-type culture and wildness were able to inhibit the fatty acid synthase (FAS) expression and induce the activation of PPARalpha or PPARgamma. However, extracts from liquid-type culture had a little effect on the inhibition of FAS expression and activation of PPARalpha or PPARgamma. Methanol extracts was shown to have more effects than water extracts in the inhibiting FAS and activating PPARalpha and PPARgamma. These results suggest that A. camphorata may exhibit a hypolipidemic effect and further studies are to examine the hypolipidemic effect by animal model.