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• 中文關鍵字	白朮；中藥炮製；制胃酸作用；毒性試驗；指標成分分析		
• 英文關鍵字	Atractylodis Rhizoma；the Processing of Chinese herb；Anti-ulcer；Toxicity assay；Bioactive subances analysis		
• 中文摘要	本研究購入全國北、中、南區市售白朮共 38 件，含 6 件生品，再以 HPLC 分析檢測其 atractylon 及 atractylenolides II, III 之含量，發現各區之間的含量差異大，其全國平均值如下：市售生品平均之 atractylon 含量爲 2.873 mg/g 及炮製品平均爲 1.803 mg/g; 市售生品 之 atractylenolide II 爲 0.693 mg/g 及 atractylenolide III 爲 1.532 mg/g; 炮製品: atractylenolide II 爲 0.878 mg/g 及 atractylenolide III 爲 1.914 mg/g。 白朮自行炮製結果顯示：潤製及炒製 10 分鐘後 atractylon 會明顯下降， atractylenolides II 及 III 會上升，推測白朮之成分，因加工，使 atractylon 氧化成 atractylenolides II 及 III，其中以清炒及紅土炒 5 分鐘之白朮含倍半帖總量最高。然而蒸製白朮結果顯示，加入不同輔料蒸製後，成分變化不明顯，且水蒸與米泔水蒸之總含量較高，因而建議可用水蒸白朮軟化組織即可。 另，以生品、紅土及灶心土炒 5 分鐘及清炒 30 分鐘白朮（白朮炭）之萃取物，進行胃幽門結紮法之胃保護評估，結果顯示紅土炒之白朮片對胃保護最爲明顯，因而推測紅土炒之白朮確實可增強保護胃壁之作用，但與其酸鹼度無直接之關係，適合於白朮之炮製。Ames 毒性試驗之評估結果，焦白朮與白朮炭不會有致突變之作用。		
• 英文摘要	The 38 kinds of commercial Atractylodis Rhizoma (included 6 kinds of raw Atractylodis Rhizoma) were purchased from Taiwan and the quantitative analysis of sesquiterpenoids (atractylon, atractylenolids I, II, III) was performed by HPLC system. The results showed, the average content of atractylon, atractylenolides II and III was 2.873, 0.693, 1.532 mg/g in raw commercial Atractylodis Rhizoma and 1.803, 0.878, 1.914 mg/g in processed, respectively. In the present investigation, we collected three kinds of commercial		

Atractylodis Rhizoma, processed by ourselves and detected the content of sesquiterpenoids (atractylon, atractylenolids I, II, III). The results showed, the amount of atractylon in Atractylodis Rhizoma was decreased and atractylenolides II and III increased by soaked and stir-fired processing. However, Atractylodis Rhizoma was stir-fired for 5 min, which richly contented with total sesquiterpenoids. The amount of total sesquiterpenoids was not significantly changed in steamed Atractylodis Rhizoma. Therefore, we suggested that steam is a good method to softer Atractylodis Rhizoma. The other hand, the anti-ulcer effects and toxic analysis of Atractylodis Rhizoma were evaluated between raw and processed. The results showed, Atractylodis Rhizoma was stir-fired with red soil for 5 min which could more prevent the ulcer in rats than the other processed methods. Moreover, raw and processed Atractylodis Rhizoma do not showed significant mutagenicity and toxicity in Ames (TA 98) tests and acute toxicity assay via oral administration. In according to the results, we suggested the best-processed method of Atractylodis rhizoma was stir-fired with red soil for 5 min.