

### 中華民國中醫師公會全國聯合會新聞稿

發稿日期:民國108年7月8日星期一

發稿單位:公共關係室

連 絡 人:陳主任

連絡電話:(02)2959-4939

## 賀 本會陳旺全理事長 倒地蜈蚣草改善脂肪肝研究成果 繼獲中華民國專利後 再獲美國專利的肯定 台灣中醫的崇高榮耀

本會理事長陳旺全講座教授與衛生福利部國家中醫藥研究所團隊近日再傳捷報,經過多年地研究努力,證實「錫蘭七指蕨(Helminthostachys zeylanica)」(又稱:倒地蜈蚣草)能有效改善肥胖型脂肪肝,繼去(民國 107)年榮獲我國經濟部智慧財產局核頒專利證書後,今(108)年更是大放異彩、揚眉國際,榮獲美國政府認可並頒授專利證書(如附件),這是台灣醫療研究成果在國際舞台的優異表現,謹與台灣鄉親分享這得來不易的喜悅。

當前全球有 25 億以上的人口有脂肪肝的問題,其中 約有 20%的病人會發展成肝炎,約 7%的病人會變成肝硬 化、甚至是肝癌;脂肪肝一般分為「酒精性脂肪肝」與 「非酒精性脂肪肝」等兩大類,前者多是飲酒過量所致, 後者多因肥胖、高血脂症、糖尿病、高血壓、內分泌異 常等代謝異常引起。台灣約有四分之一的人口罹患脂肪肝等代謝疾病,目前可知的治療方式,似乎僅能仰賴病人飲食控制及自主運動,此外尚無有效的治療或預防方法,由此可知,脂肪肝的形成對人體健康具有極大的影響及風險,必須提早採取正確的預防措施與因應對策,如此才能有效提高生活品質,降低政府的醫療與長期照護成本。

錫蘭七指蕨(倒地蜈蚣草)為台灣民間常用的抗發炎草藥,在中國大陸、東南亞、印度等地亦被長期、廣泛地使用,由於錫蘭七指蕨的根莖具有退燒藥及消炎劑等功能,在傳統醫療上常用作治療各種炎症性疾病,並應用在處理胰臟或肺部等疾病。然而,過去全球醫學文就用在處理胰臟或肺部等疾病。然而所謂不完團隊首次獻稅之有關錫蘭七指蕨對於抗肥胖或抗脂肪肝等活性如完配數量七指蕨萃取物能透過活化 AMPK 調控的途徑,來路低肝臟的脂肪堆積,並有效改善脂肪肝等研究成果,已受到全球醫界的高度矚目,目前此專利已經技轉稅果。內台灣知名的 GMP 中藥廠,其專利技術為【錫蘭七指蕨、入地蜈蚣素及黃酮類化合物用於治療或預防新陳代謝疾病的用途】,期以讓台灣中醫藥的研究成果造福全球人類。

# 中華民國中醫師公會全國聯合會



US010272124B2

### (12) United States Patent Huang et al.

### (54) USE OF HELMINTHOSTACHYS, UGONINS OR FLAVONE-BASED COMPOUNDS FOR THE TREATMENT OR PREVENTION OF METABOLIC DISEASES

(71) Applicant: National Research Institute of Chinese Medicine, Ministry of Health and Welfare, Taipei (TW)

(72) Inventors: Cheng Huang, Taipei (TW);
Keng-Chang Tsai, Taipei (TW);
Yu-Ling Huang, Taipei (TW);
Ming-Jaw Don, Taipei (TW);
Hsiu-Chen Huang, Taipei (TW);
Wang-Chuan Chen, Taipei (TW);
Hui-Kang Liu, Taipei (TW)

(73) Assignce: NATIONAL RESEARCH
INSTITUTE OF CHINESE
MEDICINE, MINISTRY OF
HEALTH AND WELFARE, Taipei

(\*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 86 days.

(21) Appl. No.: 15/485,985

(22) Filed: Apr. 12, 2017

(65) **Prior Publication Data**US 2017/0348367 A1 Dec. 7, 2017

(30) Foreign Application Priority Data

Jun. 6, 2016 (TW) ...... 105117782 A

(51) Int. Cl. A61K 36/12 (2006.01) A61K 31/352 (2006.01)

(58) Field of Classification Search
CPC .. A61K 2236/00; A61K 31/352; A61K 36/11;
A61K 36/12; A61P 3/00; A61P 11/00
See application file for complete search history.

(56) References Cited

### **PUBLICATIONS**

Parveen R, et al "A rewiew on Antidiabetic Angiospermic plants from the regions of Uttarakhand, India" IOSR Journal of Pharmacy (e)-ISSN: 2250-3013, (p)-ISSN: 2319-4219, vol. 6,iss.10,ver.1, (Oct. 2016), pp. 14-61. (Year: 2016).\*

Alqasounni SI, et al "Screening of some Traditionally Used Plants for Their Hepatoprotective Effect" Phytochemicals as Nutraceuticals—Global Approaches to Their Role in Nutrition and Health, Dr Venketeshwer Rao (Ed.), ISBN: 978-953-51-0203-8, Mar. 23, 2012, chapter 14, pp. 255-278. (Year: 2012).\*

Suja SR, et al "Evaluation of Antihepatotoxic Potential of Helminthostachys zeylanica (Linn.) Hook. f., a Medicinal Fern (10) Patent No.: US 10,272,124 B2 (45) Date of Patent: Apr. 30, 2019

against Ethanol Induced Liver Damage: In vitro and In vivo Studies "American Journal of Experimental Biology (May 17, 2014) vol. 1 No. 1 pp. 16-30. (Year: 2014).\*

Wu KC, et al "Ugonin M, a Helminthostachys zeylanica Constituent, Prevents LPS-Induced Acute Lung Injury through TLR4-Mediated MAPK and NF-κB Signaling Pathways" Molecules, Apr. 1, 2017, 22, 573, 15 pages; doi:10.3390/molecules22040573. (Year: 2017).\*

Wu KC, et al "Quality Control of the Root and Rhizome of Helminthostachys zeylanica (Daodi-Ugon) by HPLC Using Quercetin and Ugonins as Markers" Molecules, Jul. 5, 2017, 22(7), 1115, 10 pages; https://doi.org/10.3390/molecules22071115. (Year: 2017).\* Hsieh HL, et al "Evaluation of Anti-Inflammatory Effects of Helminthostachys zeylanica Extracts via Inhibiting Bradykinin-Induced MMP-9 Expression in Brain Astrocytes" Mol Neurobiol, 2016 (pub online Nov. 2, 2015), 53, pp. 5995-6005; doi 10.1007/s12035-015-9511-9. (Year: 2016).\*

Fitrya, et al "Ugonin J Flavonoid from Tunjuk Langit (Helminthostachys zeylanica Linn.) Root Extract" Indo. J. Chem., 2010, 10 (2), pp. 233-238. (Year: 2010).\*

Liao W-Y, et al "Cyclohexylmethyl Flavonoids Suppress Propagation of Breast Cancer Stem Cells via Downregulation of NANOG" Evidence-Based Complementary and Alternative Medicine (ECAM), Apr. 4, 2013 (pub. online), vol. 2013, Article ID 170261, 14 pp.; doi:10.115. (Year: 2013).\*

Huang YC, et al ("Anti-inflammatory flavonoids from the rhizomes of Helminthostachys zeylanica" J. Natural Products,2009,72(7), pp. 1273-1278. (Year: 2009).\*

Suja SR, et al "Evaluation of Antihepatotoxic Potential of Helminthostachys zeylanica (Linn.) Hook. f., a Medicinal Fern against Ethanol Induced Liver Damage: In vitro and In vivo Studies" American Journal of Experimental Biology (AJEB), May 17, 2014, 1(1), pp. 16-30. (Year: 2014).\*

Fern K, et al "Helminthostachys zeylanica", Useful Tropical Plants Database, 2014, ret. Oct. 2018, <url: tropical.theferns.info/viewtropical. php?id= Helminthostachys+zeylanica>, 2 pages. (Year: 2014).\* NCBI-NLM "Ugonin L" PubChem (CID: 10365741), <a href="https://pubchem.ncbi.nlm.nih.gov/compound/10365741#section=Substances-by-Category?">https://pubchem.ncbi.nlm.nih.gov/compound/10365741#section=Substances-by-Category?</a>>, accessed online Oct. 25, 2018, 11 pages (Year: 2018).\*

(Continued)

Primary Examiner — Aaron J Kosar (74) Attorney, Agent, or Firm — Muncy, Geissler, Olds & Lowe, P.C.

#### (57) ABSTRACT

Disclosed is a use of *Helminthostachys zeylanica*, ugonins or compounds of formula (I) for the treatment or prevention of metabolic diseases comprising at least one selected from metabolic syndrome, excessive lipid accumulation, obesity, overweight, fatty liver, hepatic steatosis, hepatitis, cirrhosis, liver cancer, dyslipidemia, hyperlipidemia, hypertriglyceridemia, hyperlipoproteinemia, hypercholesterolemia, cardiovascular disease, hyperglycemia, hyperinsulinemia, diabetes mellitus type 2, insulin resistance, insulin disorder, impaired glucose tolerance and a combination thereof.

12 Claims, 10 Drawing Sheets