

講 座 教 授

	姓 名	周 昌 弘
	出生日期	(西元)1942 年 09 月 05 日
	學 歷	台灣大學植物學系理學士 (1965) 台灣大學植物學研究所理學碩士 (1968) 美國加州大學聖塔芭芭拉校區生物科學系植物生態學博士 (1971) 加拿大多倫多大學植物學系博士後研究 (1971-1972)
	經 歷	中央研究院植物研究所副研究員 (1972-1976)；研究員 (1976-2002) 國立台灣大學植物學系副教授 (與中研院合聘) (1972-1976)；教授 (與中研院合聘) (1976-1999) 美國奧克拉荷馬州立大學生化系、德州大學奧斯汀校區植物系、華盛頓州立大學農藝及土壤學系訪問學者 (1978-1979) 中央研究院植物研究所所長暨諮詢委員、國科會生命科學研究推動中心主任 (1989-1996) 國際毒物學聯合會中華民國委員會主任委員 (IUTOX) (2000-) 國際生物科學聯合會中華民國委員會主任委員 (IUBS) (1988-) 國際生物科學聯合會執行委員會委員 (1991-1997)；副會長 (1997-2000) 國際環境科學委員會中華民國委員會主任委員 (1999-) 太平洋科學協會執行委員會委員 (1998-) 及中華民國委員會主任委員 (1995-) 中央研究院評議員 (1989-2004)；台灣省林試所、畜試所、特有生物研究保育中心評議員 (1989-；1980-；1994-) 行政院永續發展委員會委員 (1998-2000) 教育部學術審議委員會委員 (1997-2000)；學審會常務委員 (2003-2004) 行政院農委會自然文化景觀審議委員會委員 (1989-) 中華植物學會理事長 (1983-1984；1991-1992；2003-2005)、中國生物學會理事長 (1987-1988)、 中華民國雜草學會理事長 (1999-2000) 教育部國中生物科編審委員會主任委員 (1995-1999) 國立編譯館高中生物類科教用書審定委員會 (2000-) 中研院植物學彙刊主編 (1989-1996) 國立中山大學生物科學系教授兼學術副校長 (借調) (1999-2002) 教育部94年度科學教育指導委員會 (2005) 國立屏東科技大學校長 (2002-2006) 教育部學術審議委員會常務委員 (2007-) 國際生物科學聯合會第30屆執行委員會委員 (IUBS) (2007-)
現 職	發展中世界科學院院士 (TWAS) (1993年) 中央研究院院士 (1994年) 國立屏東科技大學 热帶農業暨國際合作系 講座教授(2006.8~迄今)	
專 長	植物生態學、植物化學生態學、植物分子生態學	
個人網頁	http://www2.cmu.edu.tw/~ecology/teacher/ChangHungChou1.htm	

曾獲得之學術榮譽	科學月刊社第一屆通俗科學論文獎（1981） 教育部學術獎（1982） 總統府最優人員獎（1982） 中國生物學會生物學研究獎（1985） 國科會傑出研究獎 三次（1985-1987；1987-1989；1991-1993） 國科會優等研究獎 四次（1989-1991；1993-1995） 國科會特約研究計畫主持人（1995-2001），傑出特約研究員獎（2002） 教育部八十五年度辦理環境教育績優人員（1997） 發展中世界科學院院士（1993） 中央研究院院士（第二十屆）（1994） 台灣省立台南一中第二屆傑出校友（1996） 國際生物科學聯合會副會長（1997-2000） 蘇俄科學院傑出國際學術交流貢獻褒揚獎（1999） 國立中山大學中山講座教授（1999-2002） 教育部國家講座（九十學年度）（2001-2004） 中華民國土壤學會獎（2001） 日本創價大學最高榮譽賞（2003） 中華民國雜草學會學術成就獎（2003） 教育部優秀教育人員獎（2006）
通訊錄	地址 台中市 404 北區學士路 91 號 中國醫藥大學 生物多樣性研究中心
	電話 (04) 2205-3366 ext. 1633
	傳真 (04) 2207-1500
	E-Mail choumasa@mail.cmu.edu.tw

(A) 期刊論文(Refereed Paper)

1a : SCI 原始論文

- Chiang, Y. C., **Chou, C. H.**, Lee, P. R. and Chiang, T. Y. 2001. Detection of leaf-associated fungi based on PCR and nucleotide sequence of the ribosomal internal transcribed spacer (ITS): the source of contamination in *Miscanthus*. Bot. Bull. Acad. Sin. 42: 39-44. (SCI)
- Tseng, M. H., **Chou, C. H.**, Chen, Y. M. and Kuo, Y. H. 2001. Allelopathic prenylflavonones from the fallen leaves of *Macaranga tanarius*. J. Nat. Prod. 64 (6): 827-828. (SCI)
- Lee, T. H., Lee, S. S., Kuo, Y. C. and ***Chou, C. H.** 2001. Monoterpene glycosides and triterpene acids from *Eriobotrya deflexa*. J. Nat. Prod. 64 (7): 865-869. (SCI)
- Hsing, Y. I., Hsieh, J. S., Peng, C.-I., **Chou, C. H.** and Chiang, T. Y. 2001. Systematic status of the *Glycine tomentella* and *G. tabacina* species complex based on ITS sequences of nuclear ribosomal DNA. J. Plant Res. 114: 343-351. (SCI)
- Huang, S., Chiang, Y. C., Schaal, B. A. **Chou, C. H.**, and Chiang, T. C., 2001. Organelle DNA phylogeography of *Cycas taitungensis*, a relict species in Taiwan. Molecular Ecology. 10: 2669-2681. (SCI)
- Chiang, T. Y., Chiang, Y. C., Chen, Y. J., **Chou, C. H.**, Havanond, S., Hong, T. N., Huang, S. 2001. Phylogeography of *Kandelia candel* in East Asiatic mangroves based on nucleotide variation of Chloroplast and mitochondrial DNAs. Molecular Ecology 10: 2697-2710. (SCI)

7. Yang, C. M., Chen, J. C., Peng, L. L., Yang, J. S. and ***Chou, C. H.** 2002. Chi-Chi Earthquake-caused Landslide: grey prediction model for pioneer vegetation recovery monitored by satellite images. Bot. Bull. Acad. Sin. 43: 69-75. (SCI)
8. Lee, T. H., G. J. Wang, C. K. Lee, Y. H. Kuo and ***Chou, C. H.** 2002. Inhibitory effects of glycosides from the leaves of *Melaleuca quinquenervia* on vascular contraction of rats. Planta Medica 68: 492-496. (SCI)
9. Yang, C. M., Lee, C. N. and ***Chou, C. H.** 2002. Effects of three allelopathic phenolics on chlorophyll accumulation of rice (*Oryza sativa*) seedlings: I. Inhibition of supply-orientation. Bot. Bull. Acad. Sin. 43: 299-304. (SCI)
10. Ge, X. J., Chiang, Y. C., **Chou, C. H.** and Chiang, T. Y. 2002. Nested clade analysis of *Dunnia sinensis* (Rubiaceae), a monotypic genus from China based on organelle DNA sequences. Conservation Genetics 3 (4): 351-362. (SCI)
11. Chiang, Y. C., Ge, X. J., **Chou, C. H.**, Wu, W. L. and Chiang, T. Y. 2002. Nucleotide Sequence Diversity at the Methionine Synthase Locus in Endangered *Dunnia sinensis*: An Evaluation of the Positive Selection Hypothesis. Molecular Biology and Evolution 19: 1367-1375. (SCI)
12. Tsai, C. C., Huang, S. C., Huang, P. L., Chen, Y. S. and ***Chou, C. H.** 2002. Phenetic relationship and identification of subtribe Oncidiinae genotypes by random amplified polymorphic DNA (RAPD) markers. Scientia Horticulturae 96: 303-312. (SCI)
13. Chiang, Y. C., Schaal, B. A., **Chou, C. H.**, Huang, S. and Chiang, T. Y. 2003. Contrasting selection modes at *Adh1* locus in outcrossing *Miscanthus sinensis* vs. inbreeding *Miscanthus condensatus* (Poaceae). American Journal of Botany 90 (4): 561-570. (SCI)
14. Tsai, C. C., Huang, S.C., Chen, C. H., Tseng, Y. H., Huang, P. L., Tsai, S. H. and ***Chou, C. H.** 2003. Genetic relationship of *Rhododendron* (Ericaceae) in Taiwan based on the sequence of the internal transcribed spacer of ribosomal DNA. J. Horticultural Science & Biotechnology 78 (2): 234-240. (SCI) (NSC91-2621-B-110-001, NSC92-2621-B-110-001, NSC93-2621-B-110-001)
15. Tseng, M. H., Kuo, H. S., Chen, Y. M., and ***Chou, C. H.** 2003. Allelopathic potential of *Macaranga-Tanarius*.(L.) Muell.-ARG. J. Chem. Ecology. 29 (5): 1269-1286. (SCI) (NSC88-2311-B-001-026, NSC89-2311-B-001-018, NSC90-2311-B-110-002)
16. Tsai, C. C., S. C. Huang, P. L. Huang and ***Chou, C. H.** 2003. Phylogeny of the genus *Phalaenopsis* (Orchidaceae) with emphasis on the subgenus *Phalaenopsis* based on the sequences of the internal transcribed spacers 1 and 2 of rDNA. J. Hort. Sci. & Biotech. 78 (6): 879-887. (SCI)
17. Liao, C. C., **Chou, C. H.**, and Wu, J. T. 2003. Regeneration patterns of yellow cypress on down logs in mixed coniferous-broadleaf forest of Yuanyang Lake Nature Preserve, Taiwan. Botanical Bulletin Academia Sinica 44: 229-238. (SCI)
18. Tsai, C.C., C.I. Peng, S.C. Huang, P. L. Huang, ***Chou, C. H.** 2004. Determination of the genetic relationship of *Dendrobium* species (Orchidaceae) in Taiwan based on the sequence of the internal transcribed spacer of ribosomal DNA. Scientia Horticulture 101: 315-325. (SCI)
19. Yang, C. M., M. C. Wang, Y. F. Lu, I. F. Chang and ***Chou, C. H.** 2004. Humic substances affect the activity of chlorophyllase. Journal of Chemical Ecology 30 (5): 1057-1065. (SCI)
20. Shen, Y. C., S. M. Hsu, Y. S. Lin, K. C. Cheng, C. T. Chien, **Chou, C. H.** and Y. B. Cheng. 2005. New Bicyclic Taxane Diterpenoids from *Taxus sumatrana*. Chem. Pharm. Bull. 53 (7): 808-810. (SCI)
21. Lai, I. L., H. Scharr, A. Chavarria-Krauser, R. Küsters, J. T. Wu, **Chou, C. H.**, U. Schurr, A. Walter. 2005. Leaf growth dynamics of two congener gymnosperm tree species reflect the heterogeneity of light

- intensities given in their natural ecological niche. Plant, Cell and Environment 28 (12): 1496-1505. (SCI)
22. Tsai, C. C., S. C. Huang, and ***Chou, C. H.** 2006. Molecular phylogeny of *Phalaenopsis* Blume (Orchidaceae) based on the internal transcribed spacer of the nuclear ribosomal DNA. Plant Systematics and Evolution (256): 1-16. (SCI)
 23. Chang, I. F. and ***Chou, C. H.** 2006. Ecotypic variation of *Imperata cylindrica* populations in Taiwan: II. Physiological and biochemical evidences. Botanical Studies 47 (2): 175-184. (SCI)
 24. Tsai, C. C., S. C. Huang, P. L. Huang and ***Chou, C. H.** 2006. Molecular evidences for the natural hybrid origin *Phalaenopsis x intermedia* Lindl. Journal of Horticultural Science & Biotechnology 81(4): 691-699 (SCI)
 25. K. Vivek, C. I. Chang and ***Chou, C. H.** 2006. Two isomeric epoxysitosterol from *Rhododendron formosanum*: ^1H and ^{13}C NMR chemical shift assignments. Magnetic Resonance in Chemistry (44): 817-819. (SCI)
 26. Chi-I Chang, Chiy-Rong Chen, Yun-Wen Liao, Hsueh-Ling Cheng, Yo-Chia Chen and ***Chou, C. H.** 2006. Cucurbitane-Type Triterpenoids from *Momordica charantia*. Journal of Natural Products 69: 1168-1171. (SCI)
 27. K. Vivek and **Chou, C. H.** 2007. Allelopathic Potential of *Rhododendron formosanum* HEMSL. Journal of Chemical Ecology. (submit)
 28. Tsai, C. C., Chiang, Y. C., Huang, S. C., Chou, C. H. 2007. Molecular phylogeny of *Phalaenopsis* Blume (Orchidaceae) based on the plastid and nuclear DNA . Plant Systematic and Evolution. (submit)

1b：非 SCI 原始論文

1. Liao, C. C., **Chou, C. H.**, Wu, J. T., 2003. Population structure and substrates of Taiwan yellow false cypress (*Chamaecyparis obtuse* var. *formosana*) in yuanyang lake nature reserve and nearby szumakuszu, Taiwan. Taiwania, 48 (1): 6-21.

(B) 研討會論文(Conference Paper)

1. Tsai, C. C., Peng, C. I., Huang, S. C., Huang, P. L., and **Chou, C. H.**, 2002. Genetic relationship of *Dendrobium* spp. (Orchidaceae) in Taiwan region based on the sequence of internal transcribed spacer of ribosomal DNA. In:International Symposium on Tropical Floriculture Industry and Biotechnology. Pingtung, Taiwan. p. 35.
2. Tsai, C. C., Huang, S. C., Huang, P. L., and **Chou, C. H.**, 2002. Phylogeny of genus *Phalaenopsis* (Orchidaceae) with emphasis on subgenus *Phalaenopsis* based on the sequence of internal transcribed spacer 1, 2 of ribosomal DNA International Sympoium on Agricultural Biotechnology. Tainan, Taiwan. p. 114-119.
3. 蔡奇助、周昌弘，2004。蝴蝶蘭屬分子親緣關係。植物生技產業應用研討會，國立屏東科技大學，頁 130-140。
4. 蔡奇助、黃勝忠、黃炳龍、周昌弘， 2004。蝴蝶蘭天然雜交種 *Phalaenopsis xhybrida* 的分子證據。植物生技產業應用研討會，國立屏東科技大學，頁 498-500。
5. 洪承裕、蔡奇助、周昌弘，2004。馬櫻丹花瓣藍色色素 F3',5'H 基因的分子選殖.。植物生技產業應用研討會，國立屏東科技大學，頁 337-348。
6. Chi-Chu Tsai, Sheng-Chung Huang, Ping-Lung Huang, and **Chang-Hung Chou** 2004. Phylogenetics, Biogeography,

and Evolutionary Trends of the *Phalaenopsis amabilis* Complex Inferred from ITS1 and ITS2 of Nuclear DNA 生物
多樣性在農業生技產業發展之國際學術研討會 國立屏東科技大學 p. 325-339

7. 蔡奇助、黃勝忠、黃柄龍、周昌弘， 2004。白花蝴蝶蘭種群(*Phalaenopsis amabilis*)分子親緣關係之研究。中國園藝學會九十三年度年會發表。
8. Tsai, C.C., Huang, S. C., **Chou, C. H.** 2005. Molecular phylogeny of *Phalaenopsis* Blume (Orchidaceae) based on the internal transcribed spacer of the nuclear ribosomal DNA. XVII International Botanical Congress, Vienna, Austria. (Poster)
9. Chiang, Yu-Chung, Schaal, Barbara A., **Chou, C. H.** 2005. Molecular phylogeography of *Oryza rufipogon* based on cpDNA variation. First DIVERSITAS Open Science Conference, Oaxaca, Mexico. (Oral Presentation)
10. Tsai, C. C., Chiang, Y. C., **Chou, C. H.** 2006. Molecular phylogeny of *Phalaenopsis* Blume (Orchidaceae) based on the plastid and nuclear DNA. Botany 2006, California State University-Chico, USA. (Poster)
11. Chiang, Y. C., Shen, T. H., Hsu, T. W., Chiang, T. Y., Hung K. H., Tsai, C. C., **Chou, C. H.** 2006. Conservation genetics of *Scutellaria taiwanensis* and *S. austrotaiwanensis*, two rare species in Taiwan. Botany 2006, California State University-Chico, USA. (Poster)
12. Yu-Chung Chiang, Pei-Yuan Li, Chi-Chu Tsai, Tsair-Bor Yen, Yo-Chia Chen, Chu-Chun Chien, Chun-Yen Huang, Tzu-Hsiu Shen, **Chou, C. H.** 2007. Genetic differentiation between wild and cultivated *Momordica charantia*: evidence of SSR and chloroplast DNA variation. 2007 Botany Conference, Chicago, USA. (Poster)
13. Chi-Chu Tsai, Yu-Chung Chiang, Sheng-Chung Huang, **Chou, C. H.** 2007. Phylogenetics and biogeography of the *Phalaenopsis amabilis* complex inferred from internal transcribed spacer of nuclear DNA. 2007 Botany Conference, Chicago, USA. (Poster)
14. Yen, Tsair-Bor, Su, Yu-Ho, Chiang, Yu-Chung, **Chou, C. H.** 2007. Evaluation of antifungal effect of *Litchi chinensis* Sonn. ethanolic extracts against tree pathogenic fungi. 2007 Botany Conference, Chicago, USA. (Poster)

(C) 專書及專書章節(Proceedings, Monograph or Book Chapter)

1. Liao, C. C. and **Chou, C. H.** 2001. Effect of biodiversity on ecosystem functioning. Nat. Sci. Counc. Monthly 29: 81-90 (in Chinese).
2. **Chou, C. H.**, Chiang, T. Y., Chiang, Y. C. 2001. Towards an integrative biology research: a case study on adaptive and evolutionary trends of *Miscanthus* populations in Taiwan. Weed Biol. and Manage. 1:81-88.
3. Young, C. C. and **Chou, C. H.**, 2003. Allelopathy, plant pathogen and crop productivity. in Advances In Plant Disease Management: pp. 89-105. H. C. Huang and S. N. Acharya, eds. Research Signpost.
4. 周昌弘，楊盛行 編，2003，三生農業的挑戰。台北市：國立台灣大學生命科學院生化科技學系。（ISBN 957-01-5866-2）
5. Huang, H. C. and **Chou, C. H.** 2005. Impact of plant disease biocontrol and allelopathy on biodiversity and agricultural sustainability. Plant Pathology Bulletin 14: 1-12.
6. **Chou, C. H.** 2006. Introduction to Allelopathy. in Allelopathy: A Physiological Process with Ecological Implications: pp. 1-9. Reigosa, M. J., N. Pedrol and L. González eds.
7. Huang, H. C., **Chou, C. H.** and R. S. Erickson 2006. Soil sickness and its control. in Allelopathy in

Soil Sickness. Grodzinsky, A. M. ed. (In press)

8. Tsai, C. C. and **Chou, C. H.** 2007. Molecular phylogenetics of *Phalaenopsis* taxa: an update. FOPB book series. (Review) (In press)