THAISZIA JOURNAL OF BOTANY

The Notes on the Collectors and Authors as well as location names related to the Dawn Redwood, *Metasequoia glyptostroboides*, after it's been discovered almost sixty years from Central China (1941-2000)

JINSHUANG MA1, HANG SUN2 & WEI CAO3

¹Harvard University Herbaria, 22 Divinity Avenue, Cambridge, MA 02138, USA; e-mail: jma@oeb.harvard.edu

MA J., SUN H. & CAO W. (2000): The Notes on the Collectors and Authors as well as location names related to the Dawn Redwood, *Metasequoia glyptostroboides*, after it's been discovered almost sixty years from Central China (1941-2000). – Thaiszia – J. Bot. 9(1999): 143-147. – ISSN 1210-0420.

ABSTRACT: The Dawn Redwood in English, Shuisha in Chinese, "Living Fossil" in general favor, *Metasequoia glyptostroboides* in Latin, the scientific name, has been found almost sixty years from central China (1941-2000). The plant has been cultivated almost all over the world and has been apprised widely both from the professionals and amateurs. The related papers about its magic story of discoveries and scientific studies have been more than several dozens in the modern botanical/horticultural literatures. The Chinese collectors and location names, however, are not properly used in modern bibliographies, some at least not standard used, i.e. wrong used, and even again and again. The paper mainly deals with these wrong or not proper names, and especially from the historic view to correct them to the modern standard use. Besides these, the selected references on the Dawn Redwood are also provided here for the further interesting readers or researchers.

Keywords: Metasequoia glyptostroboides; nomenclature, China

²Kunming Institute of Botany, Chinese Academy of Sciences, Kunming, 650204, China ³Institute of Applied Ecology, Chinese Academy of Sciences, Shenyang, 150015, China

Background

Wade-Giles System was used in the Chinese spellings for the person names and the location names in China around the time when Dawn Redwood was found, the 1940's. As every knows that when People's Republic of China was found in 1949, the National Language Committee changed the name spelling in Hanyu Pinyin System in 1958a). So some scholars worked before and after then usually have two different kinds of name, one in Wade-Giles System and one in Pinyin System. Such as famous botanist of Kunming Institute of Botany, Chinese Academy of Sciences, Cheng-Yih Wu (Wade-Giles, abbreviated as C.Y.Wu) or Zheng-Yi Wu (Pinyin, also as Z.Y.Wu). However, only few old scientists may only have Wade-Giles System, such as Shiu-Ying Hu (S. Y. Hu) since she left China in 1946 and remains in USA until very recent, only with Wade-Giles name. The most of young taxonomists have Pinyin name only. Another matter should be mentioned here is that the widely dialects reason, especially from South China, some scholar names may be different from above rules, like Cantonese dialect, which still have some influence on the today's Pinyin spelling. Such as the expert of Magnolia family of South China Institute of Botany, Yuh-Wu Law in Wade-Giles (abbreviated as Y. W. Law), but modified by Cantonese dialect since standard Wade-Giles name for him should be Yuh-Hu Lau, and standard Pinyin name should be Yu-Hu Liu. More important here is that the Chinese name expressed in different European languages, such Guizhou province in Pinyin, Kweichow in English, and Kouy-Tcheou in French, and Kweitschou or Guidschou in German. Armed with above information one could better understand the real meaning or explanation when dealing with the old literatures of Dawn Redwood and its story of "The Magic Living Fossil."

Here, we take an example from the new issue of Arnoldia, The Magazine of the Arnold Arboretum (Volume/Number 58/4-59/1, 1998-1999, no publication time available. However, we, three authors, were the Chinese visitors in Harvard University then, received the magazine from our mail box of Harvard University Herbaria in the early morning of Saturday, June 26, 1999).

Part 1, Personal Names

| Wade-Giles | Pin Yin | Abbreviation | Reference |
|------------------------------|----------------|--------------|---|
| Cheng, Wan-Chun | Zheng Wan-Jun | W.C.Cheng | CHEN WANJUN (Arnoldia, 84 ^{b)}) |
| Chu Kwei-Ling | Qu Gui-Ling | K. L. Chu | QU ZHONG-XIANG ^{C)} |
| Chung, Hsin-Hsuan | Zhong Xin-Xuan | H.H.Chung | CHUNG, H. H. (Arnoldia, 84) |
| Hsueh, Chi-Ju ^{d),} | Xue Ji-Ru | C.J.Hsueh | XUE JI RU (Arnoldia, 84) |

a) Not 1979 (see Arnoldia 58(4)-59(1): 84, 1999.

b) Here, the magazine name represents the new issue of 1999 and its page.

c) The alternate name of K. L. Chu in Pinvin.

d The dialect used by H. H. Hu

| Wade-Giles | Pin Yin | Abbreviation | Reference |
|--------------------------|---------------|--|---------------------------|
| Hsieh, Chi-Yu | Xue Ji-Ru | C.Y.Hsueh C.T.Hwa T. Kan C. Wang T. Wang Z. Wang C. L. Wu L.X.Yang | Hu, H. H. paper |
| Hwa, ChingTsai | Hua Jing-Cai | | Collector for W. C. Cheng |
| Kan Tuo | Gan Duo | | Hu, H. H. paper |
| Wang, Chan ^{e)} | Wang Zhan | | Hu, S. Y. paper |
| Wang Tan ^{f)} | Wang Zhan | | Hu, H. H. paper |
| Wang Zhang ^{g)} | Wang Zhan | | Hsueh paper |
| Wu Chung-lung | Wu Zhong-Lun | | Hu, H. H. paper |
| Yang Lung-hsin | Yang Long-Xin | | Hu, H. H. paper |

Part 2, Location Names

(for further location, please reference CHU & COOPER 1950)

| Wade-Giles | Pin Yin | Grade | Reference (page) |
|--|--|---|--|
| An-shi Chien-shih Chien-nan Chungking Chungjing Chunghsien En-shih Feng-kieh Fung-Chia Hsiao-ho Hsio-ho Huong-pan-yin Houng-pin-ying Kai Hsien Kaisien Kien-shi Li-chuan Lichuanhsien Li-chwan Modaoqi/Moudo Mou-tao-chi | Enshi Jianshi Jiannan Chongqingh) Chongqing Zhongxian Enshi Fengjie Fengjie Xiaohe Xiaohe Huangpinying Huangpinying Huangpinying Kai Xian Kai Xian Jianshi Lichuan Lichuan Lichuan Modaoxi Modaoxi | City(region) County County City(province) City(province) County City(region) County Village Village Village Village Village County Village Village | CHU & COOPER (map) Wade-Giles spelling Hu H. H. paper Hu H.H. paper Arnoldia (45, 84) CHU & COOPER (map) MERRILL (map) MERRILL (map) CHU & COOPER (map) WADE-GILES spelling MERRILL (map) CHU & COPPER paper MERRILL paper Hu S. Y. paper CHU & COOPER paper MERRILL paper CHU & COOPER paper MERRILL paper CHU & COOPER paper CHU & COOPER paper MERRILL paper WAGE-Giles spelling Arnoldia (84) HU.H.H & MERRILL paper |
| Modaoqi ^{I)} Motaotsi | Modaoxi Modaoxi | Village Village | Hseuн paper Hu S.Y. paper |

e) The Mr. Wang Zhan's Wage-Giles name.
f) The dialect used by H. H. Hu.
g) Mr. Hseuh's wrong spelling for Mr. Wang Zhan.
h) Chongqing, formerly belongs to Sichuan Province, was separated in the middle 1990's as fourth Municipality after Beijing, Shanghai and Tianjin.
i) Local dialect called Xi (stream in English) as Qi.

| Wade-Giles | Pin Yin | Grade | Reference (page) |
|---|--|--|--|
| Peiping ^{J)} Peking ^{K)} Shen-lung-chia Shiao-ho Shio-ho Shui-sa-pa Shui-sa-pa Shui-sa-pa Wan Hsien Wanhsien Wan-hsien Wang Chia Ying ^{J)} Wang Shia Ying Wang-chia-ying Wang-kia-ying | Beiping Beijing ShenNongJia Xiaohe Xiaohe Shuishaba Shuishaba Shuishaba Wan Xian Wan Xian Wan Xian WangJiaYing WangJiaYing WangJiaYing WangJiaYing WangJiaYing | City(province) City(province) Mount Village Village Village Village Village City(region) City(region) City(region) Village Village Village Village Village Village Village Village Village | MERRIL paper Wade-Giles spelling Hu, H. H. paper CHU & COOPER (map) Hu H.H. paper Hu H.H. paper CHU & COOPER (map) Hu S Y paper Hu H.H. paper MERRIL (map) CHU & COOPER (map) Arnoldia (84) Arnoldia (30) CHU & COOPER (map) MERRILL (map) |
| Zhongjing | Chongqing | City(province) | HSEUH paper |

Part 3, Selected Important Papers and WWW on Metaseguioa

- ANDREWS H. N. (1948): Metasequioa and the Living Fossil. Bull. Missouri Bot. Gard. 38(5): 79-85.
- BARTHOLOMEW B., BOUFFORD D. E. & SPONGERB S. A. (1983): Metasequoia gylptostroboides, Its present Status in Central China. J. Arn. Arb. 64:105-128.
- CHANEY R. W. (1948): Redwoods in China. Nat. Hist. Magaz. 47: 440-444.
- Chu K. L. & Cooper W. S. (1950): An ecological reconnaissance in the native home of Metasequoia glyptostroboides. Ecology 31(2): 260-278.
- EARLE C. J. (1999): http://www.geocities.com/RainForest/Canopy/2285/index.htm
- GITTLEN W. (1998): http://www.calacademy.org/calwild/archives/fall98/wood.htm
- GRESSITT J. L. (1953): The California Academy Lingnan dawn-redwood expedition. Proc. Cal. Acad. Sci. 28(2): 25-58.
- HENDRICK D. R. (1999): http://www.airnet.net/redwood/rwmeta.html
- HSUEH C. J. (1985): Reminiscences of Collecting the Type Specimens of Metasequoia glyptostroboides. Arnoldia 45(4): 10-18.
- Hu H. H. (1948): How Metasequoia, the "living fossil", was discovered in China. J. NY Bot. Gard. 49: 201-207.
- Hu H. H. & Cheng W. C. (1948): On the new family Metasequoiaceae and on Metasequoia glyptostroboides, a living species of the genus Metasequoia found in Szechuan and Hupeh. Bull. Fan Mem. Inst. Biol. II. 1: 153-166.
- Hu S. Y. (1980): The Metasequoia Flora and Its Phytogeographic Significance. J. Arn. Arb. 61:21-94.
- Li J. H. (1999): Metasequoia: An Overview of Its Phylogeny, Reproductive Biology, and Ecotypic Variation. Arnoldia 58(4)-59(1): 54-59.
- LIU Y. C. Zhou X. T. & Su P. L. (1978): Shuisha. Hubei People's Press [in Chinese]. MERRILL E. D. (1948): Metasequoia, another "living fossil." Arnoldia 8: 1-8.

k) Wade-Giles spelling of Beijing.

j) Old Name of Beijing before 1949.

Wang Chia Ying is commune name, Wang Zhan(g) is the person name, totally different each other.

Мікі S. (1953): On Metasequoia, fossil and living. 141 pp. Nippon Kôbutsu Shumi-no, Kyoto.

NAME H. (1999): Metasequoia Travels the Globe. – Arnoldia 58(4)-59(1): 72-75.

TOWNSEND M. (1998): http://www.suite101.com/article.cfm/trees/11105

YANG H. (1999): From Fossils to Molecules: The Metasequoia Tale Continues. – Arnoldia 58(4)-59(1): 60-71.

> Received: 13 October 1999 Accepted: 28 October 1999

Book review

K. G. MUKERJI [ed.]: Concepts in Mycorrhizal Research (Handbook of vegetation science 19/2).

Kluwer Academic Publishers, P.O. Box 17, 3300 AA Dordrecht, The Netherlands, 1996, ISBN 0-7923-3890-1

Many taxa of fungi and plants are involved in mycorrhizal associations and so mycorrhizal symbioses are important ecologically as well as economically. Plants which cover our planet are mostly dependent on mycorrhization ant it is believed that translocation of plants from water to land would not have been possible without mycorrhizae too.

Study of "symbiotical world" will be important part of biological science in coming decades.

Text of this book is divided into 13 autonome sections, presented in form of rewiev articles. The chapters include several aspects of mycorrhizal research (e.g. vesicular arbuscular mycorrhiza, mycorrhizal research and agriculture, cytological and morphological aspects, economy and ecology of mycorrhizes, molecular biology and genetics of mycorrhizal fungi etc.).

This book is valuable source of informations. It will be useful for undergraduate students as well as researchers in botany, mycology and biotechnology. It can be valuable book also for people working in agriculture and forestry.

M. BAČKOR