“活化石”
水杉发现的历史证据

撰文·供图　马金双

当编辑邀请写这篇文章的时候，第一感觉就是这是一个非同寻常的任务，因为“活化石”水杉在国人心中的地位太高了，几乎每个人都知道。然而，要准确而又无误地说得清楚，绝大多数人则未必能真正做到！为什么呢？因为留下的记录过于缺乏，而且误传或者错误地转载过多，以至于史实都被湮没！

这不能怪读者，只能说我们学术界没有尽到职责，包括当初的发现过程和后来的有关报道。今天我们纪念中国植物学会成立八十周年，同时也是水杉发现七十周年，重温有关水杉发现的历史，对于今日中国的学术界极为重要！因此，愿意提笔并与大家分享其中一些未曾公开的史实！

实际上水杉的发现历史并不复杂，只是由于众所周知的原因，我们的历史资料未能及时保存下来，加上曾经的一些不符合事实的报道引起后来不必要的争论。笔者在《植物杂志》（2003，水杉发现大事记——六十年的回顾，3：37-40）和《云南植物研究》（2003，水杉未解之迷的初探，25（2）：155-172；2006，水杉的未尽事宜，28（5）：493-504；2008，回复“对‘水杉未尽事宜’的几点意见”，30（6）：729-731）四篇文章中已经将有关的历史交代得非常清楚，有兴趣的读者可在相关刊物或在水杉网站（www.metasequoia.org）下载。这里主要向读者介绍未曾发表过的有关证据。

第一，水杉的第一份标本使得水杉的发现成为可能。王战1943年7月21日采自四川万县磨刀溪（今湖北利川谋道镇）的标本是郑万钧发现水杉的依据，也



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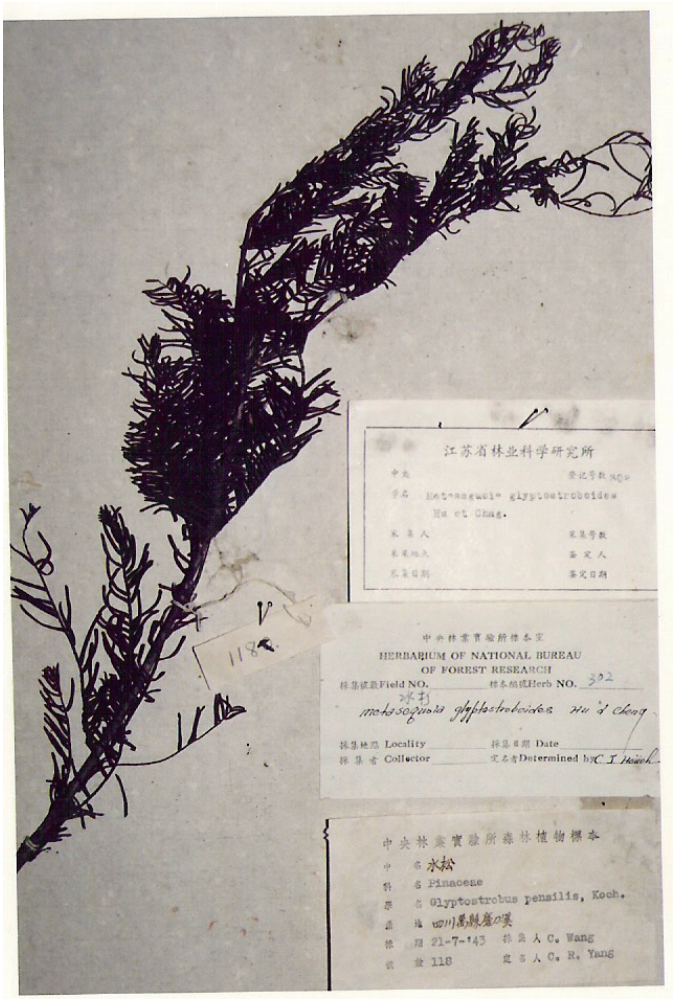
是胡先骕1946年春天找到三木茂文章时手中的唯一标本。没有这份标本，水杉的发现要推迟，而且历史也会有所不同。

第二，1981年5月14日，《植物杂志》“人物介绍”栏目编辑张燕（兼植物所学报室书记）就水杉的争论一事采访郑万钧，电话笔录为水杉的发现与争论留下唯一结论。王战采集的标本对水杉的发现起到至关重要的作用，而他人对水杉的传说是王战的标本引起发现之后。换句话说，是王战的标本引起郑万钧的发现，而不是其他说法。

第三，胡先骕在北平（今北京）收到郑万钧转来的标本最晚是1946年4月20日，而查到三木茂的水杉学名（*Metasequoia*）不晚于1946年5月9日（胡先骕分别致函哈佛大学Merrill教授和加州大学Chaney教授的信件）。此时胡先骕手中具有叶子的标本应该是王战1943年采集的118号，因为郑万钧派往水杉原产地采集的薛纪如于1946年5月18日才到达磨刀溪（薛纪如 51号，叶枝及未成熟球果，水杉模式标本）；而1946年2月20日，薛纪如首次采集水杉标本时水杉的叶子尚未萌发（薛纪如 5号，雄花枝及球果，水杉同举模式）。

历史告诉我们，任何学者的观点必须以史实为依据，否则就会留下疑问，而疑问就是后来争论的源头，也是今天水杉仍然争论之所在。水杉的发现历史再次表明保存第一手科研资料是多么重要，遗憾地是我们做得很不够，以至水杉发现七十年过去还有人不了解真相。考证科学史的唯一依据就是历史史实，任何没有依据的说法或个人意向只能在历史的长河中像污垢一样被无情地冲走，真相则永留人间。■



水杉第一份标本，王战1943年7月21日采集

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（责编　李瑄）

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所查調物生生靜

Fan Memorial Institute Of Biology

Peiping, China.

Have you received a communication from Dr. Wan-c hung Cheng announcing his discovery of a new genus of Cupressussaceae, which consists a monotypic gigantic deciduous tree,found ound Wanshen in Szec huan? What a wonderful discovery it is! Only three lofty trees of 34 meters are living.Casually I also found a few small treesof Glytotrobus pensilis in the back yards of a small village about 40 miles from Nanchang. So this proves conclusively that this c onifer can be easily planted in the 6th zone in the ** States. When we have c ollected seeds from these trees I shall send some to you. I hope this tree morely widely planted in the States.

With best regards ,

Yours very sincere ly,

H. H. Hu.

P. S. I shall return to Nanc hang in the latter pa of May and shall c ome back to Peiping with my family i September. Ant letter please send still in care of Chung University before that time.

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1946年4月20日胡先骕致函Merrill教授

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所查調物生生靜

Fan Memorial Institute Of Biology

Peiping, China.

Apr.20,1946.

Dr.E. D. Merrill,Director,
Arnold Arboretum,
Jamaica Plain,Mass.,U. S. A.

Dear Dr. Merrill:

I presume you have received my letter sent you from Nanchang,Kiangsi. I arrived Peiping April 15th to plan for the recoversion of the Fan Institute. Owing to the meagerness of fund available we have to carry on as best as we can. We have lost two thirds of our funnitures and our main building lacked of repairs. The loss in the library is considerable but not staggering. Fortunately the herbarium remained intact,although our zoological collections had suffered of considerable loss. The photographs of the specimens and their negatives are fortunately preserved.

At present the most urgent thing for me to do here is to restore the library. In this I hope you will help me as much as possible. Please send me the Arboretum journal and other publications you kindly keep reserved for our institute. Any other publications you can get for Fan institute as gift please send along. Any books or periodical publications such as Scientific Monthly etc . which you can spare yourself we shall also gratefully receive.

As to our large collections of Yunnan plants I have written to Mr. T. T. YU to begin to sort out for the Arboretum. But owing to the lack of funds and helpers I don't know when these will be ready for transportation. I hope you will write to American Embassy to arrange transportation facilities for these materials. And I hope you will send some money to get these shipped to you.

Hereafter I shall devote a great deal of our energy to rebuild the Lushan Botanical Garden and Arboretum, which suffered frightful destruc-tion in its buildings and much loss in library and nursery stocks,a great deal of which has been,however,still preserved. We shall immediately start in nursery business in order to make self-support. Already several American nursery companies wrote to Mr. F. H. Chen,the new Kee-per for seed list. We shall start to collect seeds and bulbs this fall both in the vicinity of Lushan and in Kunming and Tali. We intend to make ourselves ready for American customers. So Mr. F. H. Chen asked me to request you to buy for us a copy of the "Main Catalogue of American and European Nurserymen. Please send it directly to Mr. F. H. Chen at the Botanical Garden.

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所查調物生生靜

Fan Memorial institute Of Biology

Peiping, China.

May 3,1946.

Professor Ralph W. Chaney,
Dept. of Palaeontology,
University of California,
Berkeley,Cal.,U. S. A.

Dear Professor Chaney:

I presume you have by now received my letter I sent you when I arrived in Peiping last month. I write you this letter because I made a very important discovery in botany which has some relation to palaeobotany. A short time ago Professor Wan-chun Cheng of National Central University wrote me that he discovered in Wan Hsien,Szechuan,a new genus of conifer which is related to the Chinese water-pine, Glyptostrobus pensilis,differing in the distic-hous linear leaves and decussate cone-scales of 11 pairs. The cone has a long slender peduncle. The leaves are easily deciduous. Three large trees of 34 meters in height are discovered. This is surely a new genus with both characters of Taxodiaceae and Cupressaceae.

Then I looked up the Japanese palaeobotanist S. Miki's paper on "The clay or lignite beds flora in Japan with special reference to the Pinus trifolia beds in Central Hondo" published in Japanese Journal of Botany XI:237-3803.On page 261 he described a new genus of Taxodiaceae Metasequoia based on Sequoia disticha published by Heer in 1876, which has distichous leaves and decussate cone-scales. He described a second species,M. japonica,with smaller cones and fewer scales. The Wan Hsien species is closely allied to M. disticha but with more cone-scales;so it may be a distinct species which I propose to call M. sinica. The three living tree may have not attained its possibly greatest height,for they may be relics of once a large grove,which have fortunately escaped from woodsmen's axe. It is possible to secure seeds of this new tree which I shall try to send some to Professor Goodspeed for cultivation. This new species I shall publish jointly with Prof. Cheng in our buletins.

I am leaving for Shanghai day after tomorrow. If you write please send your letter c/f the Nat. Chung Cheng University,Nanchang,Kiangsi. I shall return to Peiping in September.

Yours very sincerely,

H. H. Hu.

1946年5月9日胡先骕致函Chaney教授

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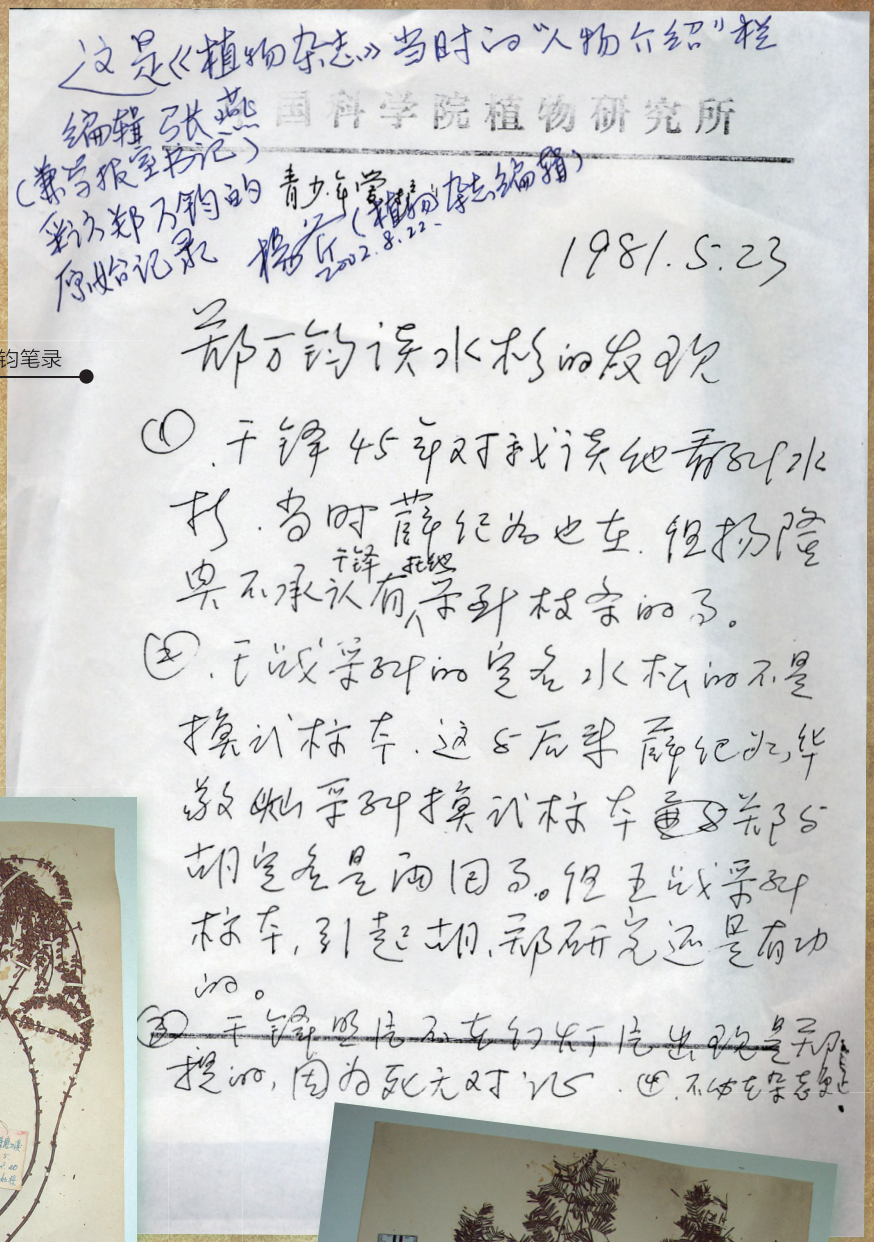
这是《植物杂志》当时设"人物介绍"栏
编辑张燕
国科学院植物研究所
(兼与报室联系)
到久郑万钧的
青少年学
原始记录
1981.5.23
郑万钧谈水杉的发现
(1). 干铎45年对我们谈他看到水
杉. 当时薛纪如也在. 但杨隆
奥不承认有采到标本的事。
(2). 王战采到的是水杉的不是
模式标本. 这与后来薛纪如华
敬他采到模式标本重复采了
和定名是两回事。但王战采到
标本,引起胡.郑研究还是有功
的。
(3). 干铎照片不在约先生处,现在是郑
提的,因为死无对证. (4). 不做专家鉴

1981年5月14日张燕采访郑万钧笔录



薛纪如5号，雄花枝及球果



薛纪如51号，叶枝及未成熟球果

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