

江西古樹 PALEO-TREES OF JIANGXI

56

内有插图，
借还时，请
详细检查。

撰稿：楊方西 王江林

攝影：

李新華 王江林 張允宜 鄭磐基

曾本廣 劉和平 朱祥福 李金森

劉運珍 郭素珍 萬愛民 紀偉濤

鄒繼循 周信芳 鄭暉 謝曉健

熊元生 桂國強 連毓江

英文翻譯：汪光強 方燕

裝幀設計：梅家強

責任編輯：

陳宏仁 劉瑩 文亦農 李一意

序

古樹，一般指生長年代久遠，蒼勁古老的樹木和樹木羣。古樹經歷了地史時期變遷的滄桑，頑強地適應、繁衍到現代，生動地記錄了大自然的變遷過程，揭示了植物種屬興衰演變的歷史過程。所以說，古樹是自然歷史長期孕育的產物，是自然歷史演變過程的“見證人”，也是活生生的無法復生的自然歷史文物。

研究古樹，對探索自然地理環境的變遷、植物區係的發生和發展規律，以及監測人類活動對自然環境的影響均有十分重要的意義。

要了解江西古樹資源的豐富、古老，有必要追溯區域地質構造和植物種羣的發展歷史。

江西是地質史上的一塊古老地區，早在中生代三迭紀末期，距今約1億8000萬年前，我國昆侖山——秦嶺——大別山以南地區還被浩瀚的海水淹沒時，包括江西在內的東南部地區已先期擡升為陸地。侏羅紀至白堊紀的燕山運動則引起大規模的塊斷活動，形成了與山嶺同走向的長條形的斷陷盆地，由此奠定了江西現代宏觀地貌的基本結構和形態。而堆積的白堊——下第三紀紅層的斷陷盆地，在漫長的各種外營力的剝蝕、夷平和水流割切下，形成了我省獨特的“盆地式”紅層山地、丘陵的破碎地貌。我省的古森林植物就在這塊古老的紅色風化殼上發生、發展和演變。

古生物研究資料表明，在中生代三迭紀末期，江西大地為裸子植物所統治，萍鄉煤礦就發現有蘇鐵科（*Cycada ceae*）植物化石；玉山縣下鎮鄉則挖掘出世界上最大的巨型木化石（硅化木）。中生代的早—中白堊世，距今約1億2000萬年，被子植物才在燕山運動構造的地殼上發展起來。由於那時古氣候乾熱，處於亞熱帶乾旱植物帶的地理環境，發育着熱帶疏林，主要由榆屬（*Ulmus*）組成，林下覆蓋着茂密的沙草蕨（*Schizaea digitata*），鄱陽湖邊生長有耐碱性的麻黃（*Ephedra*），這些足以說明當時氣候的炎熱乾旱。

從新生代上新世晚期至更新世初期，發生了強烈的喜馬拉雅第二幕塊斷運動，出現了以不同構造形態為特徵的地域分異，改變了海陸分佈的輪廓，使整個自然地理環境發生了新的變化，我省氣候亦隨之由乾熱變為濕潤，進入了東南季風氣候帶。雖然這一時期有冰期和間冰期多次干擾，但

沒有改變已逐漸形成的水熱分佈的總趨勢。從新生代開始的古新世，是我省氣候由乾熱逐漸變為溫暖濕潤的轉變時期，是古老被子植物與現代被子植物大更替的重要時期，也是常綠闊葉林發育的興旺時期。在這個時期，一些起源古老的植物種類絕滅了，如短葉杉、豎葉杉；一些古老植物不斷適應於變化了的自然地理環境而頑強地生存下來，至今仍保存着古南大陸（岡瓦納古陸）起源的許多被子植物的原始科，如木蘭科（*Magnoliaceae*）、八角科（*Illiciaceae*）、昆欄樹科（*Trochodendraceae*）、水青樹科（*Tetracentraceae*）以及觀光木屬（*Tsoongiodendron*）、榆屬（*Ulmus*）、櫟屬（*Quercus*）等；特別是與現代有親緣關係的熱帶、亞熱帶植物迅速發展起來，數量急劇增多，如殼斗科（*Fagaceae*）、樟科（*Lauraceae*）、木蘭科、山茶科（*Theaceae*）、厚皮香科（*Ternstroemiaceae*）、無患子科（*Sapindaceae*）、金縷梅科（*Hamamelidaceae*）、桃金娘科（*Myrtaceae*）、山礬科（*Symplocaceae*）、紫樹科（*Nyssaceae*）、檳香科（*Santalaceae*）、山橄欖科（*Sapotaceae*）等熱帶、亞熱帶常綠和落葉喬木種類就很多，而樺木屬（*Betula*）、胡桃屬（*Juglans*）等溫帶植物則大量減少。林內草本植物由現代分佈於熱帶、亞熱帶的鳳尾蕨〔*Pteris henryi*〕、海金沙〔*Lygodium japonicum* (Thunb.) Sw〕等植物所取代。這些熱帶、亞熱帶被子植物種類增至佔總數的70%以上，其中熱帶性科有56科，佔江西木本植物總科數的47%。熱帶、亞熱帶被子植物種屬組成了以常綠闊葉林為基本特徵的多種多樣的亞熱帶森林類型。現在江西大地還保存着新生代第三紀遺留下來的古第三紀植物區系和第三紀型的森林植被，是一些古老植物種屬的著名“避難所”。調查資料表明，這座“避難所”保存的古樹有1045株，隸屬於33科65屬79種，分佈在302個地點，其中多是我國著名的古老孑遺植物，起源於中生代白堊紀的孑遺樹種銀杏〔*Ginkgo biloba* Linn〕是世界著名的“活化石”，現在還殘存千年古樹20餘處；遠在侏羅紀以前廣佈於北半球的水松〔*Glyptostrobus pensilis* (Staunt.) Koch〕，現殘存80餘株；鵝掌楸〔*Liriodendron chinense* (Hemsl.) Sarg〕是新生代第三紀的孑遺樹種，殘存的古樹有5株；在中生代侏羅紀以前就已存在的蘇鐵〔*Cycas revoluta* Thunb.〕，現有胸圍2.4米以上，分枝數十個的千年古樹；白堊紀發展起來的羅漢松〔*Podo-*

carpus macrophyllus(Thunb.) D. Don]和短葉羅漢松[*P.m. var. maki* Endl.],現在保存有晉唐時代的古樹有12處;白豆杉[*Pseudotaxus chienii*(Cheng.) Cheng]、金錢松[*Pseudolarix kaempferi*(Lindl.) Gord]杜仲[*Eucommia ulmoides* Oliv.]、連香樹[*Cercidiphyllum japonicum* Sieb.et Zucc]、伯樂樹[*Bretschneidera sinensis* Hemsl.]等,都是起源第三紀或更古老的樹種,均有古樹遺存。

特別是一些起源古老的樹種還有原始林存在。起源於中生代的南方紅豆杉[*Taxus chinensis var. mairei*(Lemee.et Lerl.) Cheng et L.K.Hu]在井岡山下角棟,龍南縣坪坑,瑞昌縣大河塘和中港還保存有半原始的天然古樹林;武夷山自然保護區有柳杉[*Cryptomeria fortunei* Hooibrenkex otto et Dietr]和南方鐵杉[*Tsuga chinensis var. tchekiagensis* (Flous) Cheng et L.K.Fu]混交天然林;大餘縣內良殘存有長苞鐵杉[*Tsuga longibracteata* Cheng]天然林;資溪縣烏石有江南油杉[*Keteleeria cyclolepis* Flous]天然林;贛縣和宜豐分佈有南亞熱帶古裸子植物遺樹種竹柏[*Podocarpus nagi*(Thunb.) Zoll. et Mor. ex Zoll]天然林;德興縣三清山有華東黃杉[*Pseudotsuga gaussenii* Flous]天然林;其它如白豆杉、福建柏[*Fokienia hodginsii*(Dunn) Henry et Thomas]、粗榧[*Cephalotaxus sinensis*(Rehd. et Wils.) Li]、三尖杉[*Cephalotaxus fortunei* Hook. f.]、鐵堅油杉[*Keteleeria davidiana*(Bertr.) Beissn]等均有天然羣落分佈。

古生物研究資料還表明,江西植物區係的特點與世界各植物區有着密切的聯係。據調查,江西現有種子植物和蕨類植物(不含栽培植物)337科1200餘屬近4500種,其中木本植物130科410屬2000餘種,而與大洋洲、熱帶美洲、熱帶非洲、東南亞和北美洲所共有的植物區係約105屬,還有很多相應種(或替代種)。比如江西有鵝掌楸、檫樹[*Sassafras tsumu* Hemsl.]、紫樹(蘭果樹)[*Nyssa sinensis* Oliv],北美也有北美鵝掌楸[*Liriodendron tulipifera* Linn]、北美檫樹[*Sassafras albidum* Nees]和北美紫樹[*Nyssa sylvetica* Mark]等。這是江西植物區係與世界各植物區有過密切聯系的有力証明,只是在

距今約7000萬年以前，古南大陸（岡瓦納古陸）解體分離出南美洲、大洋洲和非洲之後才逐漸疏遠。所以我們說，江西是亞熱帶東部溫帶——亞熱帶植物區係的主要集散地和搖籃，不僅是許多東亞植物區係的發源地，而且有可能是世界植物區係的起源中心之一。

很顯然，從新生代古新世開始，在江西這塊古陸上興旺發展起來直至演變到現代的常綠闊葉林和殘遺的古木大樹，不僅是大自然遺留給江西的珍貴自然歷史遺產，而且是我國乃至世界植物種屬和森林植被寶庫中的一顆光耀的明珠。因此，保護這顆“明珠”的光輝和歷史地位，無疑是我們這一代人的責任。

翻閱歷史文獻，我們發現，我們先人對大自然賜予人類的這份財寶是何等的情深意切，以至不惜濃墨重彩吟誦和描繪它對人類的無私奉獻和鬥霜傲雪的巍然氣質。然而，不幸的是，許多古森林和古樹木已湮沒無踪，只留下先人的墨寶遺篇存世了。

古樹研究，不僅有存史的意義和學術研究價值，還有重要的現實意義。毋庸諱言，一棵古樹就是一部自然史，是文明古國和民族精神的象徵。因此，古樹是一部進行愛國主義教育，增強民族意識，普及科學技術的生動教材。同時，古樹是一種極為珍貴的種質資源，也就是一種“遺傳財富”。當代科學技術已經開始打開這座“遺傳財富”寶庫，使之成為一種能廣泛應用的直接的具有很高經濟價值的通貨。所以，我們應該以超過我們先人那樣的胸懷和激情去認識自然歷史遺產的價值，保護自然歷史遺產的地位，合理地利用“遺傳財富”，以造福於社會和子孫後代。

古樹研究是一項繁重的工作，既要實地考察、訪問，更要對古樹的起源、變遷進行考證。江西把古樹資源作為科學考察研究，始於1982年，首先由廬山植物園開始調查。1983年廬山自然保護區對廬山地區的古樹資源進行了詳細的調查和收集，宜春地區林業局，婺源、寧都、安福縣林業局也開展了調查收集工作。《江西森林》一書收編了江西古樹研究的部分成果。

1985年，江西省林業廳組織對全省古樹資源進行系統研究，并把研究成果整理編輯成本書出版。書中裸子植物按鄭萬鈞系統，被子植物按恩格勒（Engl.）系統，屬、種則按學名的拉丁字母順序排列。

本書是一項集體勞動的成果。參加調查的單位有：江西省林業廳科教處，廬山植物園以及廬山自然保護區管理處，安福、寧都、玉山、武寧、廣昌、東鄉、萬安、永豐、德興、蓮花、泰和、南昌、弋陽、橫峰、廣豐、婺源、修水、星子、瑞昌、興國、資溪、黎川、信豐、定南等縣林業局，萍鄉、景德鎮、鷹潭市園林處和林科所。參加調查的人員主要有王江林、李新華以及毛廬英、王大富、李遠震、沈家智、陸宗林、劉智新、陳友吾、楊文涵、艾超羣、鄧少虹、劉英華、易志華。參加古樹圖片拍攝的有李新華、王江林、張允宜以及曾本廣、朱祥福、鄭磐基等。樹種鑒定和學名整理由賴書紳負責。

在本書出版之際，我們向參加這項工作的同志和單位，向提供資料和給予支持的同志和單位致以衷心謝意。

由於時間倉促，本書很難把江西的古樹資源收編完善，同時，由於編者水平有限，可能存在不少錯誤，敬請讀者批評指正。

李明志

1988年7月

introduction

Paleo-trees refer to age-old trees or a colony of trees of the remote past. They witnessed and survived geological changes of the earth, and evolved and multiplied to this day. They recorded on them the evolution of vegetation and nature itself. Therefore we can say that they are a result of and a witness to the evolution of nature, and an invaluable living historical relic of nature.

The study of paleo-trees is very significant to the exploration of the transition of geographical conditions of the earth, the effect of human activities on it, and the origin and development of flora. In order to study paleo-trees in Jiangxi province, it is necessary to review the development of the local geological structure and vegetation colonies.

Jiangxi is an old area in terms of geological history. At the end of the Triassic period of Mesozoic era, over 180,000,000 years ago, when the area south of Kunlun-Qinling-Dabie Mountains was still under the sea, the southeast of China including Jiangxi already rose up and became a piece of land. The building of Yanshan Mountain during Jurassic and Cretaceous periods caused the large-scale movement of fault blocks, resulting in the formation of a fault basin along the run of the mountain. It laid a basic structure of land form in Jiangxi. The basin, deposited with a redbed during Cretaceous period and the later part of Tertiary period, was eroded, flattened

and severed by outer forces over a long period of time, leaving a broken land form of mountainous regions and hilly areas of red soil in the province. The paleo-forests and vegetation in Jiangxi originated and developed on such a piece of land with its red mantle rock.

Paleontological study shows that at the end of Triassic period gymnosperms dominated the plant kingdom in present Jiangxi area. Fossil plants of Cycadaceae family were discovered in Pingxiang Coal Mine in the province, and a largest piece of petrified wood in the world was dug out in Xiazhenxiang, Yushan County. During the early and mid-Cretaceous period, 120,000,000 years ago, angiosperms began to develop in the area within the scope of Yanshan Mountain movement. Because of the dry and hot climate of the time and the area's location in dry vegetational zone of subtropics, tropical sparse woods composed of mainly *Ulmus* developed here. The ground in the woods was meanwhile covered by thick *Schizaea digitata*. *Ephedra*, which is alkali-resisting, developed at the same time around Poyang Lake. This proves the extreme heat and dryness of the time.

Between the end of Pliocene epoch and the beginning of Pleistocene epoch, occurred the second stage of fault block movement of the Himalayas. It caused the re-division of regions by their geological structure, and changed the outline of the sea and land as well as geographical conditions of the earth. Jiangxi also became humid and changed into monsoon climate zone in spite of the occurrence of several glacial and interglacial periods during the time.

Palaeocene epoch was the transitional period in which Jiangxi climate changed from dryness and hotness to warmth and humidity, and paleo-angiosperms were replaced by modern angiosperms. It was also a period in which evergreen broadleaved forests flourished. During the time, some species of the remote origin became extinct while others evolved and survived. Today in Jiangxi still exist many angiosperms of the Gondwana origin such as Magnoliaceae, Illiciaceae, Trochodendraceae, Tetracentraceae, *Tsoongidendron*, *Ulmus* and *Quercus*. Tropical and subtropical plants that are related to their modern families, in particular, multiplied rapidly, such as Fagaceae, Lauraceae, Magnoliaceae, Theaceae, Ternstroemiaceae, Sapindaceae, Hamamelidaceae, Myrtaceae, Symplocaceae, Nyssaceae, Santalaceae and Sapotaceae. Meanwhile some temperate genera such as *Betula* and *Juglans* greatly decreased, and herbaceous plants in forests were replaced by plants that now grow in tropics and subtropics such as *Pteris henryi* and *Lygodium japonicum*. These tropical and subtropical angiosperms increased to make up 70 percent of the vegetation in Jiangxi province. Among them there are 56 tropical families accounting for 47 percent of the total ligneous families in Jiangxi. Angiosperms of tropics and subtropics formed a variety of subtropical evergreen broadleaved forest types.

Today flora and forest vegetation of Tertiary period still exist in Jiangxi, which has become a sanctuary for some paleoplants. A recent research shows that the province has 1,040 paleo-trees of 77 species belonging to 65 genera and 33 families. They are scattered in 302 places. They include *Ginkgo biloba* of thousands of years old, which was originated from the Cretaceous period of Mesozoic era and is known as a living fossil in the world. It exists in over twenty places in Jiangxi. There are about 80 *Glyptostrobus pensilis* trees, which were distributed widely in the Northern Hemisphere before Jurassic period, five *Liriodendron chinense* trees of

Tertiary origin, and Jin and Tang *Podocarpus macrophyllus* and short-leaved *Podocarpus macrophyllus* of Cretaceous origin in 12 places. *Cycas revoluta*, originated before Jurassic period, has grown to 2.4 meters in girth and has dozens of branches. There are also species of Tertiary period or earlier such as *Pseudotaxus chienii*, *Pseudolarix kaempferi*, *Eucommia ulmoides*, *Cercidiphyllum japonicum* and *Bretschneidera sinensis*.

Jiangxi even has primeval forests of trees of the remote origin. There are semi-primeval natural forests of *Taxus chinensis*, originated from Mesozoic era, in Xiaodong of Jinggangshan County, Pingkeng of Longnan County, and Dahetang and Zhonggang of Ruichang County. Wuyi Mountain Natural Preserve has mixed natural forests of *Cryptomeria fortunei* and *Tsuga chinensis*. There are natural forests of *Tsuga longibracteata* in Dayu County, of *Keteleeria cyclolepis* in Wushi, Zixi County, of *Pseudotsuga gaussenii* in Sanding Mountain, Dexing County, of *Podocarpus nagi* in Gan and Yifeng Counties and of *Amentotaxus argotaenia* in Guanshan Mountain Natural Preserve in Yifeng. There are also some natural communities of *Pseudotaxus chienii*, *Fokienia hodginsii*, *Cephalotaxus sinensis*, *Cephalotaxus fortunei* and *Keteleeria davidiana*.

Paleontological study also shows that flora of Jiangxi has close relations with flora of other parts of the world. The province has 4,500 species, belonging to 1,200 genera of 337 families, of seed plants and ferns (excluding cultivated plants). Among them there are 2,000 species of ligneous plants, belonging to 410 genera of 130 families. Of them 105 genera exist in Oceania, American and African tropics, North America and Southeast Asia. Jiangxi also has many related or substitute species of flora of those parts of the world. For instance, it has *Liriodendron chinense*, *Sassafras tzumu* and *Nyssa sinensis*; while North America has *Liriodendron tulipifera*, *Sassafras tzumu* and *Nyssa sylvetica*. This proves that flora of Jiangxi was once closely related to flora of other parts of the world. But they gradually drifted apart when the Gondwana Land disintegrated into South America, Oceania, and Africa. Therefore we say Jiangxi is a cradle and a collecting and distributing center of flora of subtropics and eastern temperate zone of Subtropics. It is the birthplace of flora of East Asia. It may also be one of the world's birthplaces of the world's flora.

The evergreen broadleaved forests originated on the land of Jiangxi during Paleocene epoch, and the paleo-trees that survived to this day, are not only a historical legacy endowed to Jiangxi by nature. They also have great value in the treasurehouse of the world's flora and forest vegetation. Therefore it is our duty to preserve them and protect their valuable position.

Historical literature tells us that our ancestors cherished and held passion for this legacy of nature so much, that they eulogized them in writings and paintings. But unfortunately, many paleo-plants have become extinct, and we can see them only in artistic works.

The study of paleo-trees has its historical and scholarly as well as practical value. They record natural history and reflect the ancient civilization and the spirit of the Chinese nation. They can be used for the patriotic education of the nation, the enhancement of national consciousness and the popularization of science and tech -

nology. They are also rare resources for quality seeds, or they can be called "genetic wealth." Modern science and technology is exploring this wealth, which is becoming economically valuable everyday. We should understand the value of this legacy and treasure it more than our ancestors did. We must preserve it and make reasonable use of it for the good of society and our posterity.

The study of paleo-trees is a heavy task. It requires on-the-spot investigation and textual criticism of their origin and evolution. Jiangxi province started the research project in 1982, initiated by Lushan Mountain Botanic Garden. In 1983 Lushan Mountain Natural Preserve investigated and collected the resources of paleo-trees in Lushan area. The Forestry Bureaus of Yichun Prefecture and Wuyuan, Ningdu, and Anfu Counties also conducted such projects. Part of their results have been included in the book *Forests in Jiangxi*.

In 1985 the Forestry Department of Jiangxi Province sponsored a systematic research project of paleo-trees in the province. This book is the result of the project. It uses Zheng Waniun System for gymnosperms and Engl. System for angiosperms. Families and genera are arranged in alphabetical order.

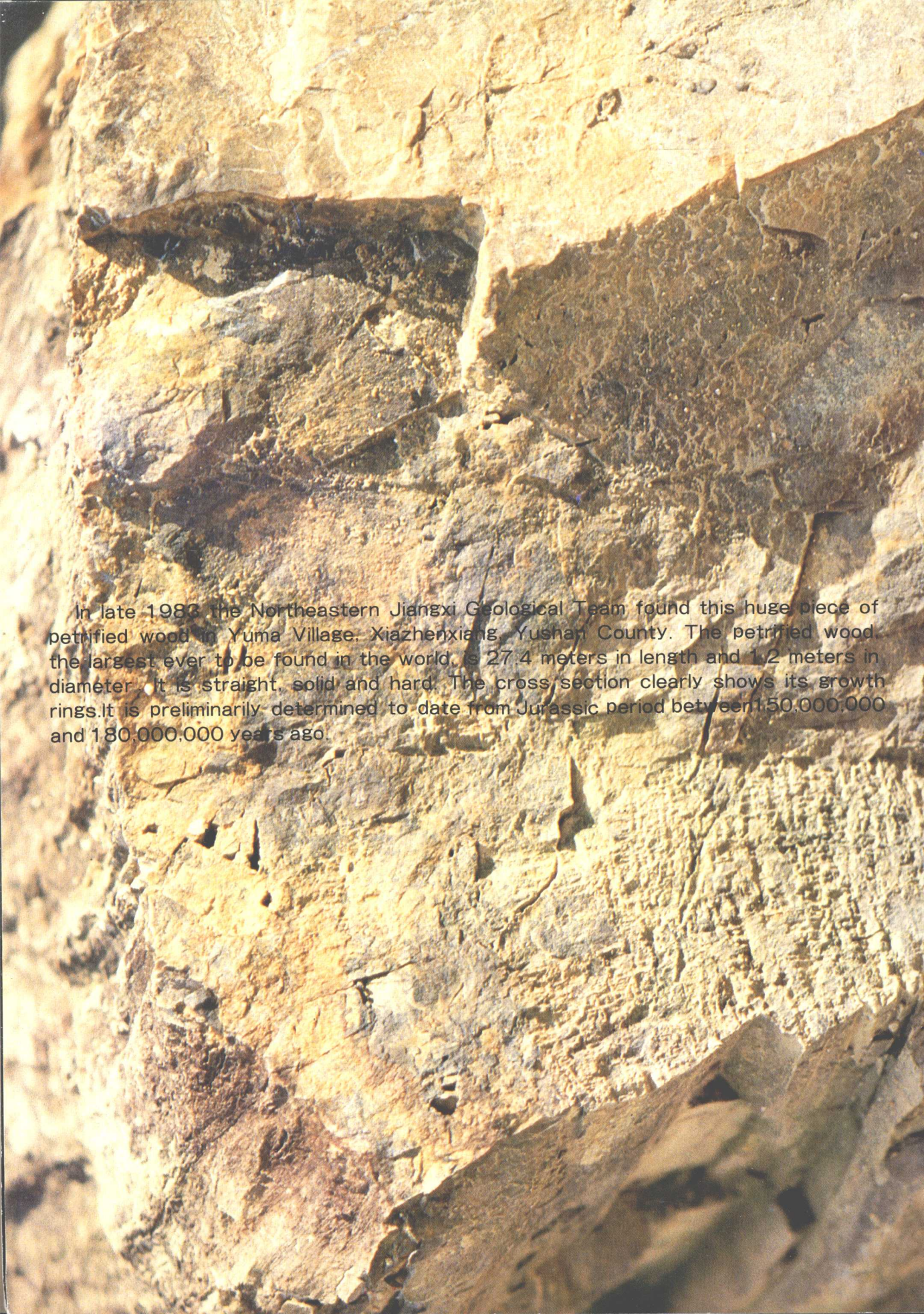
This book is a result of combined effort. The participants in the research project are: the Science and Education Section of the Forestry Department of Jiangxi Province, the Administrative Offices of Lushan Mountain Botanic Garden and Lushan Mountain Natural Preserve, the Forestry Bureaus of Anfu, Ningdu, Yushan, Wuning, Guangchang, Dongxiang, Wanan, Yongfeng, Dexing, Lianhua, Taihe, Nanchang, Yiyang, Hengfeng, Guangfeng, Wuyuan, Xiushui, Xingzi, Ruichang, Xingguo, Zixi, Lichuan, Xinfeng and Dingnan Counties, and the Municipal Gardening Bureaus and the Municipal Research Institutes of Forestry of Pingxiang, Jingdezhen and Yingtan. Individual participants are mainly: Wang Jianglin, Li Xinhua, Mao Luying, Wang Dafu, Li Yuanzhen, Shen Jiazhi, Lu Zonglin, Liu Zhixin, Chen Youwu, Yang Wenhan, Ai Chaoqun, Deng Shaoqiu, Liu Yinghua and Yi Zhihua. Photographers for the book are Li Xinhua, Wang Jianglin, Zhang Yunyi, Zeng Benguang, Zhu Xiangfu, Zheng Panji and some other people. Lai Shukun is in charge of the determination of the species of trees and the systematization of their names.

At the time of its publication, we thank those individuals and units who have participated in the project and who have offered us their help and support.

Because of the lack of time, the book can not possibly include all the resources of paleo-trees in Jiangxi. It may also have some mistakes given the editor's ken of knowledge. We would appreciate criticisms and corrections from our readers.

Li Mingzhi

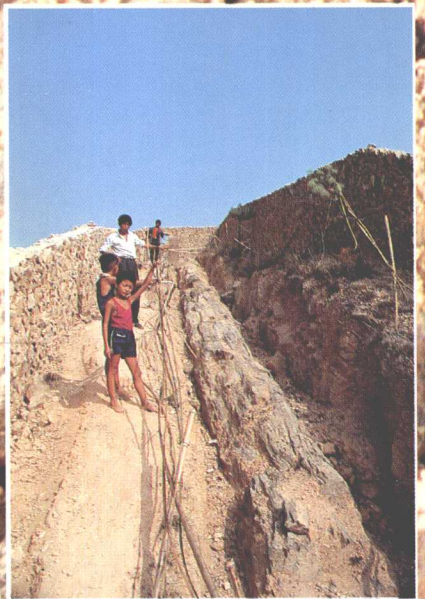
July, 1988



In late 1983 the Northeastern Jiangxi Geological Team found this huge piece of petrified wood in Yuma Village, Xiazhenxiang, Yushan County. The petrified wood, the largest ever to be found in the world, is 27.4 meters in length and 1.2 meters in diameter. It is straight, solid and hard. The cross section clearly shows its growth rings. It is preliminarily determined to date from Jurassic period between 150,000,000 and 180,000,000 years ago.

稀世珍寶——巨型硅化木

1983年底贛東北地質隊在玉山縣下鎮
鄉玉馬村發現這株巨型木化石，長27.4米，
直徑1.2米，質地堅硬，幹體挺拔，截面年
輪清晰，是迄今為止世界上發現的最大一
株。經初步鑒定，源於中生代侏羅紀的古
木大樹，距今1億5000萬年至1億8000萬
年。



巨型硅化木幹體

A huge piece of petrified wood.

硅化木橫斷面

The cross section of
the petrified wood.

目錄

裸子植物類

蘇鐵
銀杏
江南油杉
鐵堅油杉
馬尾松
黃山松
金錢松
華東黃杉
南方鐵杉
長苞鐵杉
水松
柳杉
杉木
柏木
羅漢松
竹柏
三尖杉
穗花杉
南方紅豆杉
榧樹

Gymnospermae

<i>Cycas revoluta</i> Thunb.	1
<i>Ginkgo biloba</i> Linn.	4
<i>Keteleeria cyclolepis</i> Flous	8
<i>Keteleeria davidiana</i> (Bertr.) Carr.	9
<i>Pinus massoniana</i> Lamb.	10
<i>Pinus taiwanensis</i> Hayata	12
<i>Pseudolarix kaempferi</i> (Lindl.) Gord.	15
<i>Pseudotsuga gaussenii</i> Flous	16
<i>Tsuga tchekiangensis</i> Flous Cheng	17
<i>Tsuga longibracteata</i> Cheng	18
<i>Glyptomeria pensilis</i> (Staunt.) Koch	19
<i>Cryptomeria fortunei</i> Hooibcenk ex Otto et Dietr.	21
<i>Cunninghamia lanceolata</i> (Lamb.) Hook.	24
<i>Cupressus funebris</i> Endl.	26
<i>Podocarpus macrophyllus</i> (Thunb.) D. Don	29
<i>Podocarpus nagi</i> (Thunb.) Zoll. et Mor. ex Zoll.	34
<i>Cephalotaxus fortunei</i> Hook. f.	35
<i>Amentotaxus argotaenia</i> (Hance) Pilger	36
<i>Taxus mairei</i> (Lemeeet Levl.) S.Y. Huex Liu	37
<i>Torreya grandis</i> Fort. ex Lindl.	41

被子植物類

苦槠
赤皮櫟
小葉青岡
水青岡
厚門柯
麻櫟
小葉櫟
白櫟
糙葉樹
杭州榆
白桂木
榕樹
牡丹
鷺掌楸
玉蘭

Angiospermae

<i>Castanopsis sclerophylla</i> (Lindl.) Schott.	43
<i>Cyclobalanopsis gilva</i> (Bl.) Oerst.	47
<i>Cyclobalanopsis myrsinaefolia</i> (Bl.) Oerst.	47
<i>Fagus longipetiolata</i> Seem	48
<i>Lithocarpus hancei</i> Rehd	48
<i>Quercus acutissima</i> Carr.	49
<i>Quercus chenii</i> Nakai	50
<i>Quercus fabri</i> Hance	51
<i>Aphananthe aspera</i> (Bl.) Planch	51
<i>Ulmus changii</i> Cheng	52
<i>Artocarpus hypargyrea</i> Hance	52
<i>Ficus microcarpa</i> Linn.	53
<i>Paeonia suffruticosa</i> Andr.	55
<i>Liriodendron chinense</i> (Hemsl.) Sarg.	56
<i>Magnolia denudata</i> Desr.	57

乳源木蓮	<i>Manglietia yuyuanensis</i> Law	58
樂昌含笑	<i>Michelia chapensis</i> Dandy	59
金葉含笑	<i>Michelia foveolata</i> Merr. ex Dandy	60
觀光木	<i>Tsoongiodendron odorum</i> Chun	61
樟樹	<i>Cinnamomum camphora</i> (Linn.) Presl	62
沉水樟	<i>Cinnamomum micranthum</i> (Hay.) Hay.	69
泡花楠	<i>Machilus pauhoi</i> Kanehira	70
紅楠	<i>Machilus thunbergii</i> Sieb. et Zucc.	71
湘楠	<i>Phoebehunanensis</i> Hand.-Mazz.	72
楓香樹	<i>Liquidambar formosana</i> Hance	73
欖木	<i>Loropetalum chinense</i> (R. Br.) Oliv.	74
黃檀	<i>Dalbergia hupeana</i> Hance	75
紅豆樹	<i>Ormosia hosiei</i> Hemsl. et Wils.	76
槐樹	<i>Sophora japonica</i> Linn.	77
重陽木	<i>Bischofia javanica</i> Bl.	78
黃楊	<i>Buxus sinica</i> (Rehd. et Wils.) Cheng	80
黃連木	<i>Pistacia chinensis</i> Bunge	81
珂楠	<i>Meliosma beaniana</i> Rehd. et Wils.	81
木芙蓉	<i>Hibiscus mutabilis</i> Linn.	82
山茶花	<i>Camellia japonica</i> Linn.	82
木荷	<i>Schima superba</i> Garg. et Champ.	83
紫薇	<i>Lagerstroemia indica</i> Linn.	83
藍果樹	<i>Nyssa sinensis</i> Oliv.	84
赤楠	<i>Syzygium buxifolium</i> Hook. et Arn.	85
猴頭杜鵑	<i>Rhododendron simiarum</i> Hance	85
雪柳	<i>Fontanesia fortunei</i> Carr.	86
女貞	<i>Ligustrum lucidum</i> Ait.	86
桂花樹	<i>Osmanthus fragrans</i> Lour.	87
山牡荊	<i>Vitex quinata</i> (Lour.) Will.	90
泡桐	<i>Paulownia fortunei</i> (Seem.) Sieb. et Zucc.	90
香果樹	<i>Emmenopterys henryi</i> Oliv.	91
附錄		
中文拉丁文學名對照		92
拉丁文中文學名對照		93

蘇 鐵

蘇鐵 (*Cycas revoluta*)，屬蘇鐵科蘇鐵屬常綠灌木或小喬木，生長極為緩慢，壽命長，俗稱“鐵樹”，是世界上著名的長壽觀賞樹種。起源於古生代二迭紀，距今約2億3000萬年，是最古老的裸子植物。主要分佈在我國的華南、西南及日本南部和東南亞等地。

我省現有古老的分枝蘇鐵6株。南昌市人民公園2株，據考證，是清代從峽江縣玉筍山麓古寺移植而來。該山在晉唐時代曾是我國南方著名的道、佛聖地，兩株鐵樹係當時所植，齡逾1500餘年。現樹高分別達6米、8米，胸圍1.5米、2.4米，分枝40及70餘枝。鉛山縣羅石村1株，係唐代朝臣私家花園栽培，樹齡約1300年。樹高5米，胸圍1.2米，在1米處分3幹，後分30餘枝。上饒市慶豐公園1株，係宋代寺僧栽培，1982年移入公園，樹齡約1000年，樹高4米，基部分枝7幹，最大胸圍1.4米，分枝55枝。東鄉縣珀玕和資溪縣餘家邊各1株，為元代至明代遺物，樹齡500年左右。

蘇鐵樹形優美，分枝如爪，大羽狀葉頂部伸出可達2米，形似鳳尾，葉痕似鱗，酷似“龍體”，故有“龍鳳樹”之名。

蘇鐵雌雄異株，雄花圓柱形，雌花羽狀，鮮艷奇特。球果桔紅，入藥有通經止血及療痢之效。著名的“西米”即是從蘇鐵莖中提製的淀粉。

Cycas revoluta, originated from Permian period about 230,000,000 years ago. The People's Park of Nanchang has two 1,500-year-old *revoluta* trees of the Tang Dynasty. They are respectively 1.5 and 2.4 meters in girth and six and eight meters in height.



蘇鐵雄花

Male flower
of *revoluta*.



蘇鐵雌花

Female flower of *revoluta*.

南昌市人民公園的兩株晉代蘇鐵，
樹齡1500餘年，胸圍分別為1.5米、2.4
米、樹高6米、8米。