



国家发展和改革委员会中国可持续发展森林战略研究汇组会(2010年4月23日)  
Vice Premier WEN Jiabao presided over the reporting meeting of Research on  
Forestry Strategy for China's Sustainable Development (Sept.28, 2010)

## 【支撑发展】Support and Development

为林业发展全局和林业重点工程建设提供科技支撑取得显著成绩。以中国林科院科技人员为主体完成的“中国可持续发展林业战略研究”，为中央林业《决定》的制定和以生态建设为主的林业发展战略的确定提供了科学依据；建立了5个科技服务林改示范县（点），在科技服务林改、2008年初南方冰冻雨雪灾害、汶川大地震灾后恢复重建中发挥重要科技支撑和保障作用；在林木良种选育、生态工程构建、防沙治沙、森林生态网络体系建设以及森林资源高效利用等多个领域，突破了一批关键技术瓶颈。60%的科技成果应用于林业生产，取得了显著的社会效益、生态效益和经济效益。

The Academy has made remarkable achievements as to providing scientific and technological support in line with the overall forestry development situation and key forestry programs. The Research on Forestry Strategy for China's Sustainable Development, with main professional expertise from the Academy, has provided scientific basis for the formation of "the Resolution on Accelerating Forestry Development" adopted by the Central Committee of the Communist Party of China. It has set up five demonstration counties (or point) for scientific and technical service and forestry reform, and played a vital role, by providing scientific support and service, in fighting the calamity of snow and frost in South China in early 2008, and in restoration after the great earthquake in Wenchuan. A number of breakthroughs have been made in selecting and breeding of forest tree species, ecological program development, combating desertification, establishment of forest ecological network system, and the efficient utilization of forest resources. 60% of the research results has been applied in forest production, achieving outstanding social, ecological and economic effects.





张中良院士在福建邵武示范点考察  
President ZHANG Shouping inspected the demonstration site in Shoumen, Fujian

李科周研究员在浙江考察文竹  
Vice President LI Kangqiang studied the colony situation in Zhejiang



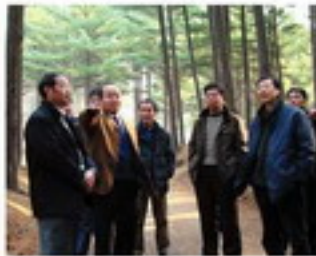
张文院士在福建邵武示范点调研  
Vice President ZHANG Wen made a study on the demonstration site in Shoumen, Fujian



纪分党组纪检组长陈景良在江西广丰示范点调研  
The Party Discipline Inspection Group Leader CHEN Jingliang made a study on the demonstration site in Guangfeng, Jiangxi



傅富祥副院长、浙江省林业厅副厅长吴洪在浙江江山示范点考察毛竹林况  
Vice President CHU Fuxiang and Deputy Director General of Forestry Department, Zhejiang, WU Hong studied the colony situation of bamboo forest in Jiangshan, Zhejiang



刘寿荣副院长在辽宁本溪示范点调研  
Vice President LIU Shoung made a study on the demonstration site in Benxi, Liaoning



杨树  
Populus



杉木  
Cunninghamia lanceolata



天然和细幼松林分  
Natural and fine stand of *Pinus massoniana*



桉树优良新品种  
Superior and new stems of *Eucalyptus*

开展了重要造林树种的育种研究工作，选育出杉、松、杨、竹子等主要用材树种，以及相思、桉木等珍贵树种优良品种（种源），提出速生、丰产、定向培育的配套栽培技术，促进了商品林的发展。

The Academy's research on the breeding of important plantation tree species has selected fine varieties of *Cunninghamia lanceolata*, *Pinus*, *Populus* and *Phyllostachys heterocycla* var. *pubescens* for timber production, fine varieties (provenances) of precious tree species of *Acacia* and *Tectona grandis* etc., and built complete silvicultural techniques for fast-growing, high-yielding oriented cultivation, greatly promoting the development of commercial timber plantations.



大型绿化工程对区域环境质量的生态  
Study on the impact of large scale green-  
ing works on environmental quality



黄淮海平原生态经济型防护林体系  
示范试验林带  
Demonstration site for the experiment of eco-  
logically and economically integrated shel-  
terbelt system in the Huang-Huai-Hai Plain



黔西南喀斯特人工造林增绿生态  
控制石漠化生态治理技术  
Ecological control techniques for the  
karst stone desertified region by hill clo-  
sure and artificial facilitation



红树林主要树种引种、造林技术  
和经营管理技术研究  
Research on the introduction and natu-  
ralization of Mangrove and techniques  
for the afforestation and management

系统研究了热带林、平原农区防护林、沿海红树林等典型森林生态系统结构与功能，建立了太行山石质山区、西南石漠化地区、西南干热河谷地区、天津盐碱地区等地区困难立地造林技术体系以及基于整个国家生态安全的森林生态网络体系宏观布局与构建技术，为支撑林业生态建设发挥了巨大作用。

A systematic study has been carried out of the composition and functions of typical forest ecosystems of tropical forest, shelterbelt in plain agricultural region, coastal mangrove forest. Afforestation technologies have been formed for difficult terrains of the rocky Taihang Mountain, the stone desertified region in the southwest, the dry-hot valley in the southwest, and the salinized land in Tianjin. Overall arrangement and composition have been built of forest ecological network system in the consideration of the ecological security of the whole country. All this has exerted a tremendous role in the development of forest ecology.



树莓  
Rubus (Raspbery)



早熟甜桔新品种  
New variety of sweet persimmon



早熟早实丰产新品种  
New early-fruiting and high-yielding variety of Camellia oleifera Abel



蜜枣  
Pinus alberti

油茶、核桃、杜仲等经济树种选育、早实、丰产配套技术研究，促进了山区经济发展。

The breeding of *Camellia oleifera*, *Juglans*, *Eucommia* and other cash trees for early fruiting, and high yielding has simulated the economic development in mountainous regions.



南宁糖深加工中试生产线  
Pilot production line for in-depth processing of ferulic acid



无色松香及五酯类产品生产线  
Production line for colorless rosin and ester products



松花粉  
Pine pollen powder



蜜柑膏  
Shells stick

松香、五倍子、植物提取物等精深加工产品开发方面取得重大突破，延长了产业链，提高了精深加工利用率和附加值，研发产品享誉国内外。

Breakthroughs have been obtained in the in-depth processing of the extracts of rosin, Knopper Gall etc., extending the industrial products chain, augmenting the use efficiency and added value.



科研人员正在对通过北京林交所进行测试  
Scientists were testing the property of the wood  
structural element in Peking Palace



麦草纤维制造的人造板  
Panel made of wheat straw



奥林匹克森林公园示范工程  
Demonstration work in the Olympic Green



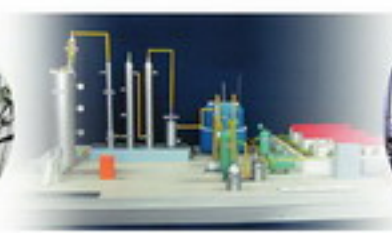
集成材和胶合板加工利用技术  
Integrated processing and use technology  
for high strength structural timber

农林剩余物人造板技术、木基复合材料等新技术，促进了环保和循环经济的发展。

Farm and forest residue panel technology and wood based composite material technology promote the development of environment protection and circular economy.



北京能源林  
Plus trees of *Sarothamnus caudata*



生物质气化供气、供热、发电技术模型  
Model for the generation of steam, heat and  
electricity by biomass gasification



连续蒸馏装置  
Apparatus for continuous distillation

生物质气化、天然油脂制备生物柴油、生物质成型炭制造等新技术，为发展生物质能源奠定了基础。

Technologies for biomass gasification, bio-diesel oil from natural oils & fats, formed charcoal from biomass lay a foundation for bioenergy.



森林分布图  
Distribution map of age groups



自主开发了GIS基础技术软件—ViewGIS  
Independently developed GIS based software—ViewGIS



基于GIS技术的火灾源影响圈方法  
GIS based mapping method for burned over land

研究和发森林资源与环境信息的获取、处理、分析以及进行经营管理决策的高新技术，为实现森林资源的稳定和持续发展服务。

New and high technology for the acquirement, treatment and analysis of information on forest resources and environment, and for forest management and decision making offer service in the endeavor for stable and sustainable development of forest resources.



利用虫线探测仪小蠹和IPM综合防治美国白蛾  
Integrated control of Hyphantria cunea by the use of Choulis counter/ing and the virus of NPV



应用刺毛虫型多核多核病毒 (DCPV) 防治松毛虫  
Use of the virus of DCPV against Pinus bionus girdlers



森林激光探测  
Prevention of forest fire from lightning strike

系统开展了森林病害、虫害以及火灾防控技术研究，取得了一批重要科技成果并在生产中推广应用，为我国林业保护事业做出了重要贡献。

Studies on the prevention of forest pests and diseases, and forest fire have turned out a number of research results, which have been applied in production, making great contribution to the forest protection in China.



液体化肥喷药系统  
Automatic system of liquid spraying of  
fertilizer and chemical



苗木运输车  
Nursery bed trailer



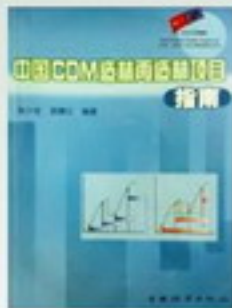
中国森林生态系统碳通量监测网络  
Monitoring network of carbon flux of China forest ecosystem



轻基质容器育苗  
Seedling production by light medium net container

林业技术装备研发成果被广泛应用于林业生产第一线，为大幅度提高我国林业生产力发挥了显著作用。

Research achievements in forest technical equipment have been extensively used in forest production, greatly improving the forest productivity in China.



“退化土壤固碳方法学”——全球第一个正式批准的方法学  
Soil carbon sequestration methodology for degraded land—the first methodology of  
fully approved in the world

针对气候变化等国际广泛关注的热点难点问题开展系统研究，取得重要成果。积极参加《联合国气候变化框架公约》、《联合国防治荒漠化公约》、《湿地公约》等公约、进程的履行谈判及辩论，维护了国家利益。

Systematic studies have been undertaken on the hot issues much concerned internationally and important achievements obtained. Active participation of the UN Framework Convention on Climate Change, UN Convention to Combat Desertification, and the International Convention on Important Wetlands etc., and of the negotiations and workshops of different international processes for the benefits of the country.