## An Atlas Reveals Vegetation Regionalization Details of China

The compiling and digitalization of the Vegetation Map of the People's Republic of China (1:1,000,000) was finally completed with the efforts of three generations of Chinese scientists, a total of more than 200 S&T workers. Main contributors to the project include CAS Members HOU Xueyu and ZHANG Xinshi, Profs. SUN Shizhou and HE Miaoguan, who are all from the CAS Institute of Botany, and Prof. LI Bo with the Inner Mongolia University. They have achieved 64 different copies of vegetation type maps (1:1,000,000); one vegetation regionalization map (1:6,000,000);

two volumes of illustrations supporting the maps; a digital version of the instructions; and a system of databases and an information management system (Vegetation Information System) for these maps.

The **vegetation type maps** present the vegetation situation of China before the middle of the 1980s and the 1990s in the last century, providing the details of all 11 vegetation type groups, 55 vegetation forms, 960 vegetation formations and sub-formations, more than 2,000 communities of dominant species, and the geographic distribution of main and industrial crops in the country. Besides, the relationship of soil and grassroots and shallow surface water with many vegetation units is also made clear.

The **vegetation regionalization map** shows the differences among the vegetation types of China in terms of vegetation districts. In this map, the country is divided into eight vegetation regions, 12 vegetation sub-regions,



The Vegetation Map of the People's Republic of China (1: 1,000,000) was published by the Geology Press by the end of 2007.

25 vegetation zones, 116 vegetation districts, and 464 vegetation sub-districts.

There are two volumes of illustrations supporting the maps. The first volume briefs the history of the project, the framework and rule of the vegetation geographic distribution in China, the principle of vegetation classification, and the system of classification. Species of main formations and sub-formations, characteristics of communities, natural environment condition, ecological geographic distribution, brief economic evaluation, and 868 vegetation photos are involved in this volume. The

other one gives an account of the geographic position of the vegetation districts and sub-districts, the natural geographic condition, the vegetation combination feature, the rational utility of vegetation, the direction of improving and protection, and a Latin-Chinese/Chinese-Latin checklist of 8,700 common plant species in figures and illustrations that usually appear in China.

An optical disk, a system of databases and an information management system are prepared for the set of maps and illustrations so that they can be easy to read and use on computer by readers. By making use of these databases and information management system, readers can make a series of modifications to any figure on computer, such as splicing, cutting the size, zooming, superimposing, changing the color and making marks. Users can also make retrieval, extract, calculation and statistics gathering to all kinds of picture factors; and form correlative subject chart or make

correlative multivariate analysis and model displaying with nature and society factors; and quickly modify the content of the figures and renew the maps.

The Vegetation Map of the People's Republic of China (1:1,000,000) provides important basic materials for understanding the status quo of the natural resources and ecological environment in China. It's of great value for studying global change, biodiversity, environmental protection and monitoring, national zoning and planning of agriculture, forestry, and animal husbandry. Meanwhile, these materials play a key role in economic development planning of above-county-level administrative units and

medium-sized river basins, short/middle-distance radio communication, development of military medicine, *etc*. Up to now, it has been applied in 44 major research



Shown is the home page of the digital version of instructions for the Vegetation Map of the People's Republic of China (1:1,000,000).

projects sponsored by more than 20 national departments, such as the Ministry of Water Resources, the Ministry of Environmental Protection, *etc*.

## VEGETATION REGIONALIZATION MAP OF CHINA

