Contact Information
Xue-Zheng Shi and Dong-Sheng Yu,
State Key Laboratory of Soil and Sustainable Agriculture
Institute of Soil Science
The Chinese Academy of Sciences
71 East Beijing Road
P.O.Box 821, Nanjing, Code: 210008
P.R. China
Tel: 0086-25-86881273(0), 0086-25-86881272(0),
Fax: 0086-25-86881000
Email: xzshi@issas.ac.cn and dshyu@issas.ac.cn

Soil Organic Carbon Dynamics for Common Cultivated Soils of China

The cultivated soils of China have been always used intensively. In order to achieve a high yield of agricultural production and protecting environment, the key issue should be the description of soil organic carbon dynamics under intensive soil management. The most common cultivated soils in China are located in Southern, Eastern, Northern and Northeastern China. Therefore, four case study areas from each of the above mentioned regions are selected as research areas. The four main soil types in these regions are Red soils(Acrisols) , Paddy soils(Anthrosols), Fluvo-aquic soils (Cambisols) and Black soils(Phaeozems). The locations for these case study areas are as follows:

No	Soil Types	Case Study areas
1	Red soils	The Yintan City and Xinguo etc 10 counties of Jiangxi Province in Southern China.
2	Paddy soils	The Taihu Lake region for the paddy soils of Jiangsu, Zhejiang and Shanghai in Eastern China (about 42 counties)
3	Fluvo-aquic soils	Daxing etc 12 counties of Beijing, Hebei and Shangdong in Northern China
4	Black soils	Hailun etc 6 counties of Helongjiang and Jielin provinces in Northeastern China

To date about 6,000 soil samples from above mentioned case study areas have been taken and their soil pH, particle composition, organic carbon, total nitrogen, available P and available K etc are analyzed. Comparing the soil organic carbon contents of these soil samples with those taken from same places during the Second National Soil Survey conducted at the beginning of 1980's aids the description of SOC dynamics for most of the heavily used and common soils. Soil organic carbon of most samples from Red soils(Acrisols) of southern China, Paddy soils

(Anthrosols) of eastern China and Fluvo-aquic soils (Cambisols) of northern China showed an increase, while those from Black soils(Phaeozems) of northeastern China revealed a decrease in last 20 years.