

## The relations between the stratum and economic indicator in Jiangxi Province

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Since the Middle Proterozoic to the Quaternary are exposed, the stratum development of Jiangxi Province is complete. The stratum of this area can be divided into 13 strata units from old to new combination of features based on epoch and lithology. Used the topic of 91 counties of Jiangxi Province administrative center and the thematic layer of stratum to composite analysis and cross-tabulation calculation, 36 administrative center distributed in the Cenozoic strata area accounted for 39.6% of the total number of administrative center, 24 administrative center distributed in the Mesozoic strata in this region, accounting for 26.4% of the province, 18 administrative center are located in Paleozoic strata region, accounting for 19.8% of the province, 13 are located in Proterozoic strata region, accounting for 14.3% of the province. Obviously, the counties and cities administrative center accounting for 65.9% in Jiangxi province located in the Mesozoic-Cenozoic strata zone.

The socio-economic indicators statistical analysis based on the stratigraphic distribution of County administrative center location show, the cities and counties, which administrative center located in the Cenozoic and Mesozoic strata, its the end of a total population about 32.49 million, accounting for 75.5% of the Province all, district covers area about 111, 885 square kilometers, accounting for 67.1% of the Province, the industrial output value of 1206 billion, accounting for 85.1% of the province, the total agricultural output value about 51.8 billion, accounting for the province's 72.8%, GDP about 2117 billion, accounting for 81.3% of the province. Therefore, the stratigraphic distribution of Jiangxi Province accord with the policy for construction the Poyang Lake Ecological Economic zone.

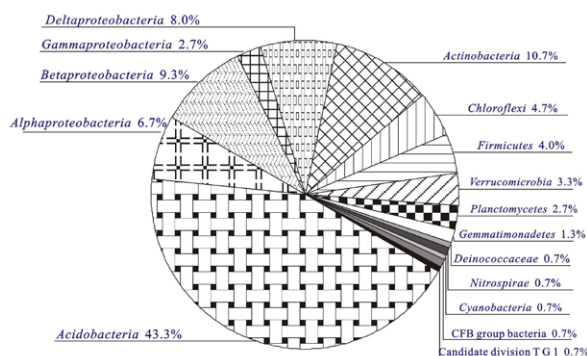
## Bacterial diversity in loess deposits, Chinese Loess Plateau

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The bacterial communities of the loess and paleosol samples in the Xifeng Loess Section (Loess Plateau, North China) were investigated using molecular phylogenetic analysis. The total DNA was extracted from those samples with the aid of bacterial universal primer and amplified by means of PCR and its product analyzed with the DGGE technique. A 16S rDNA clone library was constructed with the total 44 bacterial clones. It is striking to show that the first dominant bacterial community belongs to *Acidobacteria* group, accounting for 43% of all clones. The second dominant bacterial community in loess samples belongs to *Proteobacteria* group, representing 26% of all sequences (Fig 1). The Shannon-Wiener diversity index with depth varies between 1.69 and 2.61, in good correlation with grain size of samples. These preliminary results may provide new insight into understanding the paleoenvironment of the loess deposit on the Chinese Loess Plateau.



**Figure 1:** Frequency of bacterial 16S rDNA clones of the loess sample in the Xifeng Section

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