

PIGMENTS EVIDENCE OF CHANGING HOLOCENE CLIMATE IN SOUTHWEST SICHUAN PROVINCE, CHINA

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To examine Holocene Climatic change in southwest Sichuan, China, Fossil pigment evidence from borehole G1 in lake Yihai, Mianning County, was obtained. CD (Chlorophyll derivatives), TC (total Carotenoids), Osc (Oscillaxanthin) and Myx (Myxoxanthophyll) were detected since 9.5kaBP, and their concentrations were lower till 8.8kaBP. From 8.8kaBP, the concentrations of CD, TC, Osc and Myx were higher and varied frequently. The stratigraphy of pigments combined with pollen analysis reveals the paleoecological information on lake evolution and changing of aquatic primary productivity, based on which climatic change since Holocene in this area was discussed. In southwest Sichuan, Megathermal began from 8.8kaBP and ended at 2.6kaBP. In recent 3kaBP, the climatic change has undergone 4stages in which climatic feature was cool and wet or warm and dry.