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Measurement of Cooling Effect of Building Environment Greening

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ABSTRACT

A series of measurements showed that community greening and trees shading had different degree of cooling effect. The cooling effect of wall greening was related to factors such as heat storage capacity and the orientation of the wall, climatic conditions. As compared to the heat reduced by sheltering the solar radiation, the heat absorbed by plant transpiration had greater cooling contribution. Comprehensive considering environment, technology and economics factors, the building district greening should take trees as the priority. The trees shading can significantly drop indoor temperature and temperature fluctuation, also created better condition for night-time natural ventilation.

KEYWORDS

Wall Greening; District Greening; Trees Shading; Cooling Effect

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