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IGB investigates algae growth at Taihu

Massive growth of blue-green algae (cyanobacteria) can cause serious problems for the ecosystem of Taihu as well as for drinking water abstraction for millions of people. In order to investigate the effects of wind-induced mixing on algae growth the [Leibniz Institute of Freshwater Ecology and Inland Fisheries, Berlin \(IGB\)](#) spent three weeks with field work at Taihu. Active support by the Nanjing Institute of Geography and Limnology of the Chinese Academy of Sciences (NIGLAS) deepened the cooperation between the two institutes. Mixing conditions were simulated by computer-controlled moving of water samples. Algal growth as well as their primary production (photosynthesis) and oxygen consumption were compared for different settings. Furthermore, many samples were brought to Berlin to measure pigments, carbohydrates, proteins and DNA. Similar experiments are planned for September when the blue-green algae are usually blooming. Together with laboratory experiments, these analyses will contribute to more reliable prediction of the algae development under different weather conditions.

莱布尼茨水体生态与内陆渔业研究所在太湖现场研究藻类繁衍情况

蓝藻（蓝细菌）的迅速繁衍可能威胁太湖生态体系及数百万人口的饮用水供水。风力促使湖水的混匀，由此影响藻类的繁衍。2016年3月31日至4月22日，[莱布尼茨水体生态与内陆渔业研究所\(IGB\)](#) 科研人员利用三周时间在太湖对该效应展开调研。中科院南京地理湖泊研究所(NIGLAS)为野外工作的开展积极提供支持，从而加深了双方的科研合作。计算机支持下的“水阶梯”实现了湖水混匀过程的模拟，测出不同条件下藻类繁殖、初级生产（光合作用）以及氧气消耗情况。此外还将水样在柏林进行了对藻类色素和其他成分的分析。预计太湖藻类于九月份会有一次加速增长，届时将重复进行类似的研究活动。结合化验分析结果，该野外调研工作将致力于改进不同天气状况下对藻类繁衍期的预测。

