



### 植物品种净光合速率测定的取样技术——以苧麻(*Boehmeria nivea*(L.) Gaud.)为例

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Sampling techniques in test of net photosynthetic rate of plant cultivars,an example from ramie (*Boehmeria nivea* (L.) Gaud.)

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**摘要** 植物净光合速率(Pn)测定的取样技术决定结果的可靠性,但很少有文献专门论述.为此,分析苧麻Pn的日变化、个体间、叶位间和叶片不同位点的差异,结果表明:1天中苧麻Pn在11:00左右达到最高值,此后迅速降低,虽在下午可能回升,但不同品种有差异;品种内个体间Pn差异显著;不同叶位以顶部展开叶往下数第5~7叶Pn最高;叶片不同位点的Pn差异不显著.据此建议苧麻品种的Pn测定在上午9:00~11:00进行;每个品种/处理至少选择5个生长一致的正常植株,测定从植株顶部展开叶往下数第5~7叶近叶尖位置的Pn.还要注意植株的代表性和不同品种/处理/植株的叶位统一,叶片颜色、形状正常,无病虫害.

**关键词:** 净光合速率日变化 取样 个体 叶位 叶片位点

**Abstract:** The sampling techniques that determine the credibleness of results in testing the net photosynthetic rate (Pn) of plants were seldom discussed. For this reason, the experiment aimed at investigating the daily changes of Pn, and the difference of Pn values among individual plants, leaves of different position on a plant and the test sites on leaf in ramie cultivars. Pn rose to the peak value by 11:00 and declined afterwards, although an increase of Pn was observed in the afternoon but showing varietal difference. Significant difference was observed among individual plants within a cultivar, and among leaves of different position showing the highest Pn values in the fifth to seventh leaves counting from the essentially expanded leaf of plant top. However, Pn showed no evident difference among the five test sites on leaf. Accordingly, it is reasonable to test Pn values of ramie cultivars within the time 9:00—11:00; at least five plants and their fifth—seventh leaves should be measured, and the test site on leaf be focused near the sharp leaf end. Special attention should be paid to the representativeness of sample plants, and the agreements of leaf position for cultivars, treatments and plants; sample leaves be normal in color and shape, free from disease or insect damage.

**Key words:**

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