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[1]董友魁,刘德恒,韩艳红,等.钼肥对鲜食大豆主要光合生理指标的影响[J].大豆科学,2015,34(02):349-352.
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钼肥对鲜食大豆主要光合生理指标的影响

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Keywords: The effect of molybdenum on main photosynthetic characteristics (leaf area index (KeySearch.aspx?type=Keyword&Sel=The effect of molybdenum on main photosynthetic characteristics (leaf area index); chlorophyll content (KeySearch.aspx?type=Keyword&Sel=chlorophyll content); Pn (KeySearch.aspx?type=Keyword&Sel=Pn); cond (KeySearch.aspx?type=Keyword&Sel=cond); Ci and Ti) of two vegetable soybean varieties (Fuxian 3 and Nihonao) with four treatments were studied in different growth stages (V5 (KeySearch.aspx?type=Keyword&Sel=Ci and Ti) of two vegetable soybean varieties (Fuxian 3 and Nihonao) with four treatments were studied in different growth stages (V5); R1 (KeySearch.aspx?type=Keyword&Sel=R1); R3 (KeySearch.aspx?type=Keyword&Sel=R3); R5 and R6). The results showed that (KeySearch.aspx?type=Keyword&Sel=R5 and R6). The results showed that: vegetable soybean of application Mo exhibited an increasing of leaf area index (KeySearch.aspx?type=Keyword&Sel=vegetable soybean of application Mo exhibited an increasing of leaf area index); chlorophyll content (KeySearch.aspx?type=Keyword&Sel=chlorophyll content); Pn (KeySearch.aspx?type=Keyword&Sel=Pn); cond (KeySearch.aspx?type=Keyword&Sel=cond); Ti and a decrease of chlorophyll recession at late growth stage (KeySearch.aspx?type=Keyword&Sel=Ti and a decrease of chlorophyll recession at late growth stage); but no obvious effect with Ci With the increase of molybdenum content (KeySearch.aspx?type=Keyword&Sel=but no obvious effect with Ci With the increase of molybdenum content); the main photosynthetic characteristics reached the highest level at C3 (KeySearch.aspx?type=Keyword&Sel=the main photosynthetic characteristics reached the highest level at C3); then began to decline. And all the characteristics reached the highest level at R5 (KeySearch.aspx?type=Keyword&Sel=then began to decline. And all the characteristics reached the highest level at R5); then began to decline at R6 (KeySearch.aspx?type=Keyword&Sel=then began to decline at R6); the reaction of two varieties with different treatment was the same. (KeySearch.aspx?type=Keyword&Sel=the reaction of two varieties with different treatment was the same.)

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摘要: 为了明确钼肥对鲜食大豆光合生理指标的影响, 选用鲜食大豆品种抗鲜3号和日本青作为试验材料, 分别在不同生育时期 (V5、R1、R3、R5、R6), 测定C1 (0 kg?hm⁻²)、C2 (0.3 kg?hm⁻²)、C3 (1.5 kg?hm⁻²)、C4 (3.0 kg?hm⁻²) 四种施钼处理下上述鲜食大豆品种的叶面积指数、叶绿素含量、光合速率、气孔导度、胞间CO₂浓度、蒸腾速率, 考察了施钼量与光合指标的关系以及生育期内鲜食大豆光合效率的变化规律。结果表明: 施钼提高了鲜食大豆叶片的叶面积指数、叶绿素含量、光合速率、气孔导度、蒸腾速率, 延缓了鲜食大豆生育后期叶绿素衰退, 对叶片胞间CO₂浓度影响不明显; 随着施钼量的增加, 各光合生理指标在C3 (1.5 kg?hm⁻²) 处理达到最高, 然后开始下降; 鲜食大豆叶片在R5 (始粒) 期各光合生理指标达到最高, R6 (鼓粒) 期开始下降, 两品种对不同施钼水平处理的反应表现一致。

Abstract: Effect of Molybdenum on Main Photosynthetic Characteristics of Vegetable Soybean

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